











Docks, wharves and boom dam of the ancient city of Norumbega, on the Charles River at Watertown, Mass.



Boom dam on Cold Spring Brook, opposite Watertown.



THE DISCOVERY  
OF THE  
ANCIENT CITY OF NORUMBEGA.

A Communication  
TO  
THE PRESIDENT AND COUNCIL OF THE AMERICAN  
GEOGRAPHICAL SOCIETY

AT THEIR SPECIAL SESSION IN WATERTOWN,

NOVEMBER 21, 1889.

BY  
EBEN NORTON HORSFORD.

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Two hundred and fifty copies printed, none of which are for sale.

*This copy, No. 132*

*is presented to*

*A. A. Huxley*  
*with an account of*  
*his life and work*

249194  
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# THE DISCOVERY

OF THE

## ANCIENT CITY OF NORUMBEGA.

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JUDGE DALY, *President of the American Geographical Society*:

It is now nearly five years since I discovered on the banks of Charles River the site of Fort Norumbega, occupied for a time by the Bretons some four hundred years ago, and as many years earlier still built and occupied as the seat of extensive fisheries and a settlement by the Northmen. It is nearly as long since that discovery was the subject of a communication which I had the honor to address to you, in your official capacity, on the first of March, 1885, which communication was published in the October Bulletin of the American Geographical Society of the same year.

I have to-day the honor of announcing to you the discovery of Vinland, including the Landfall of Leif Erikson and the Site of his Houses. I have also to announce to you the discovery of the site of the ancient City of Norumbega.

To perpetuate the date of these accessions to geography, a Tower has been set up at the site of Fort Norumbega, where I first found remains of the work of the Northmen.

It had been proposed to accompany the unveiling of the Tablet on the Tower just completed with a summary account of the way by which

I had been conducted to my later discovery, together with other exercises appropriate to the occasion,—including a Poem rehearsing the story of the Vinland Sagas, and music contributed by our Scandinavian friends and by a party of ladies from Norumbega Hall of Wellesley College, so called in honor of the discovery which was communicated to the public at about the time the corner-stone of the Hall was laid. But the lateness of the season has made the out-door gathering impracticable, and an invitation has been accepted to meet in this hall.

As the Geographical Society has consented to give to the occasion the honor of its official presence as at a special meeting convened to receive the announcement of the discoveries, I ask permission to lay before you copies of the maps, ancient and modern, charts, sketches, photographs, drawings, manuscripts, original plans and surveys, which I have gathered for the study of the problems of Vinland and Norumbega and for the purpose of illustrating the detailed papers now in press, with the request that they be regarded as an earnest of the later presentation of the results of my work, in print, to the Society.

I have to ask your further permission to present here and now a summary of the course of my more recent investigation, which has resulted in the discovery of the site of the City of Norumbega.

#### JUDGE DALY'S REPLY.

PROFESSOR HORSFORD,—Allow me to say, on behalf of myself and colleagues, that it affords us great pleasure to congratulate you on your discovery. When you made your communication five years ago to the American Geographical Society, I was inclined to think that the facts then presented created a strong probability that the locality indicated

by you was in the region where the Northmen settled in this country; and the further and more extensive researches you have since made confirm that conclusion. It is especially interesting at this period, when we are preparing to celebrate the four hundredth anniversary of the discovery of this continent by Columbus, that the facts you have ascertained should be brought to light in connection with this earlier discovery of America. We have hitherto but inadequately appreciated the Northmen as a race, — their adventurous spirit, their capacity, and the degree of civilization to which they had attained in an age when Europe was but emerging from the darkness that had enveloped it for many centuries. Prof. A. H. Sayce, the learned Assyrian scholar, in a recent paper has declared, and given his reasons for, his belief that the primitive home of the Aryans — the central point of the departure or migration of that great civilizing race that at a very early period spread over the whole of Persia and India, and to the westward over the whole of Europe and America — was not, as has hitherto been supposed, the country lying on the slopes of the mountains of the Hindoo Kush, between the head-waters of the rivers Saxartes and the Oxus, but was some place in the southeastern part of Scandinavia; which would make the Northmen the progenitors of the Greeks, the Romans, and, with the exception of one or two races, of all the nations of modern Europe; which, if further researches should establish to be the fact, would make them the greatest race in the history of mankind.

Du Chaillu, in his recent work on the Viking Age and the Ancestors of the English-speaking People, — a people now so widely distributed over the surface of the globe, — refers to those countries in the north of Europe from which the Northmen came as the birthplace of a new epoch in the history of mankind. All this is very interesting in connection with what is now generally admitted, — that America was discovered by the Northmen

five centuries before the arrival of Columbus, and that for a considerable period thereafter they maintained a settlement upon our northeastern coast, and kept up during that time an intercourse with the mother country.

It remains only in conclusion, Sir, that I should express my high appreciation of your labors and of the results that have followed them, and of your liberality in the lofty, characteristic, and imposing Tower that you have caused to be erected, to mark one of the places where the Northmen dwelt, and to commemorate these discoveries.





MEMORIAL TOWER AT FORT NORUMBEGA

SET UP 1889.

AT THE MOUTH OF STONY BROOK, ON THE CHARLES.







## STORY OF THE DISCOVERY OF NORUMBEGA.

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As we all know, there have been before the world for many scores of years, in some instances for as many centuries, certain grand geographical problems, challenging the spirit of research, the love of adventure, or the passion for discovery or conquest. They are such as these: Where was Atalantis? Where was the Ultima Thule? What is there at the North Pole? Was there a Northwest Passage? Where were the Seven Cities? Where were the El Dorado of Raleigh, and the Landfalls of Leif Erikson, of Columbus, of John Cabot, of Verrazano? And where were Vinland and Norumbega?

The number of unsolved problems is steadily lessening. The last two mentioned are soon, with your consent, Mr. President, to be withdrawn from the column. I might, perhaps, say something concerning the other themes that have been named, which might interest you, and properly claim recognition at the outset of a story of geographical discovery. But you will, I am sure, prefer to anything else I might say here and to-day, a plain statement of the reasons for the faith that moved me to set up a Tower in Weston, at the junction of Stony Brook with the Charles. A wish that falls in so wholly with my sense of the requirements of the occasion leaves me no alternative. I will attempt to comply with it as best I may, asking your indulgence for the repetitions I may not escape in telling the story of how I found the seat of the earliest European colony in the New World.

Most who hear me will doubtless connect their first conception of Norumbega with the well-known poem of Whittier. You will not have

forgotten how, as you read the poem, your sympathies went out to the Christian Knight, faint with his fruitless quest for a marvellous city of which he had heard, — a city of towers and spires and gilded domes, — and a fine people, rich in furs and pearls and precious stones; nor how, as the pomp and splendor of a dying October day faded from his sight, and with them, in his rapt vision, the possible goal of his hopes, he exclaimed, almost in his latest breath, —

“ I fain would look, before I die,  
On Norumbega’s walls.”<sup>1</sup>

I have recently received the following letter from Mr. Whittier : —

AMESBURY, Oct. 30, 1889.

DEAR FRIEND, — That adventurous Scandinavians visited New England and attempted a settlement here hundreds of years before Columbus, is no longer a matter of doubt. I had supposed that the famed city of Norumbega was on the Penobscot, when I wrote my poem<sup>2</sup> some years ago; but I am glad to think of it as on the Charles, in our own Massachusetts. Thy discovery of traces of that early settlement at the mouth of Stony Brook and at Watertown is a matter of great archæological interest, and the memorial Tower and Tablet may well emphasize the importance of that discovery.

Regretting that I am unable to witness the unveiling of the Tablet, I am

Very truly thy friend,

JOHN G. WHITTIER.

You may have heard of Roberval, a French admiral, as the Lord of Norumbega; or you may remember Milton’s reference in “Paradise Lost” to the “icy blasts from the north of Norumbega;” or you may have

<sup>1</sup> The poem as published was preceded by a paragraph which read as follows: “Norumbega is the name given by early French explorers to a fabulous country south of Cape Breton, first discovered by Verrazano in 1524. It was supposed to have a magnificent city of the same name on a great river, probably the Penobscot. The site of this barbaric city is laid down on a map published at Antwerp in 1570. In 1604 Champlain sailed in search of the northern Eldorado, twenty-two leagues up the Penobscot from the Isle Haute. He supposed the river to be that of Norumbega, but wisely came to the conclusion that those travellers who told of the great city had never seen it. He saw no evidences of anything like civilization, but mentions the finding of a cross, very old and mossy, in the woods.”

<sup>2</sup> See page 43.

read of Norumbega, the "Lost City of New England," by the Rev. Dr. De Costa; or it may not have escaped you that four or five years ago there was something in the local papers about the Landfall of John Cabot in 1497, and the site of Norumbega.

Much of what I have recalled to you referred to the region not remote from our own. The old fort at the foot of the Tower concealed within its walls the entrance to the pathway that led to the desert's secret, which the Norman Knight sought for in vain. The secret was won only after protracted siege. It was a most fascinating bit of conquest; it had the charm that gathers about the finding of long-lost treasure, something of the rapture that comes with the witnessed fulfilment of prophecy.

The story of Norumbega was old, — very old for Massachusetts. Its antiquity may have furnished reason for believing the story to have had some foundation in truth. It had at least this: An Englishman had left a record of having seen a city bearing the name Norumbega, and the city was three quarters of a mile long. This man — David Ingram, a sailor — had been set on shore by Sir John Hawkins, in 1568, at Tampico, on the Gulf of Mexico, with some hundred and twenty others, in stress for lack of provisions. He had wandered all the way across the country, visiting many large Indian towns, and coming at length, in 1569, to the banks of Norumbega. He sailed in a French ship from the Harbor of St. Mary's (one of the earlier names of Boston Bay), a few hours distant from the Norumbega he visited, and ultimately got back to England, where he again met and was kindly received by Sir John Hawkins. He told a story that surpassed belief. He had seen monarchs borne on golden chairs, and houses with pillars of crystal and of silver. He had visited the dwelling of an Indian chief, where he saw *a quart of pearls*; and when his listeners murmured, he capped the relation with the statement that in one chief's house he had seen *a peck of pearls*. His relation was laid before Sir Humphrey Gilbert, the kinsman of Sir Walter Raleigh. Thevet, who had been at Norumbega,<sup>1</sup>

<sup>1</sup> The picture facing the titlepage was taken from the Newton end of the Watertown Bridge. At the extreme left is the stone dam built by the Northmen. Below are the outlines of two docks, the

on the banks of what he pronounced "one of the most beautiful rivers in all the world," and who had not improbably been at the mouth of Stony Brook, was present, and confirmed Ingram in part. Coronado's experiences in New Mexico, 1540, enable us to confirm him in more; and the brilliant researches of Mr. Cushing of Zuñi memory and achievement, and the collections of Professor Putnam of the Peabody Museum at Cambridge, enable us to comprehend most of the remainder of his relation. There were pearls; they were found in fresh-water clams (*Unios*). They are gathered by the peck at the West to-day; the Peabody Museum has half a bushel of them taken from an Ohio mound by Professor Putnam. And there were furs. French merchants (I have it from the historian of New France) in one year burned two hundred thousand beaver skins *to keep the price up*. These furs came from the land of the Bretons, — from here. And there were precious stones, — turquoise and onyx and garnet: I have samples of them. And there were ornaments of copper and silver and gold: they are found in Ohio mounds to-day. The pillars of quartz crystal and columns of wood wrapped with thin sheets of silver and even of gold, I can credit, from what I have personally seen in some parts of Mexico. On festive occasions such sheets were displayed, so Mr. Cushing tells us, as flags are with us in honor of a day or of an event. Much of what Ingram related was what he had seen. Of some things told by him he had evidently only heard: the stories of the Incas of Peru and of the Montezumas of Mexico were among them. His hardships had brought confusion to his memory.

Hakluyt wrote a book (carefully edited by the late Dr. Charles Deane, and published by the Maine Historical Society) to induce England to undertake the colonization of the country of Norumbega. Its discovery entered into some of the plans for penetrating the Northwest Passage. Sir Humphrey Gilbert lost his life in an expedition undertaken in part to find Norumbega. I have many ancient maps on which Norumbega as a country

lower one immediately above the Lewando dye-house. The plot is given again on page 34, in a portion of the engraved map of Watertown much enlarged by photography, and presents the canal — the ancient basin and fish-way and a third dock, now walled up — running parallel to, and just above the bridge.



is as prominent as New Spain or New France or Virginia, as well as many others having devices indicating a city against the name of Norumbega, subordinate to the name of Norumbega as a province.

All these belong to the class of old recorded stories; most of them were in print before the landing of the Pilgrims. One could not help thinking that they must have had some foundation in truth; the alternative involved too many conspirators and too many nationalities.

Champlain at the opening of the seventeenth century came, under Admiral De Monts, to our coast, and spent a good portion of three years exploring the bays and headlands and islands from Cape Cod to the Bay of Fundy, and studying the people and the products of the soil. The literature of geography was familiar to him. He tried to find Norumbega. He felt that somewhere there might be found the remains of a city. He went many leagues up the Penobscot from its mouth, but found nothing. He left the name on his map in the region where he sought for the city, about the mouth of the great river, but recorded his conviction that those who described it had not seen it. This learned and conscientious explorer justly commanded confidence wherever his publications were read. His readers felt his doubts. Lescarbot became merry over what he thought the delusion. Still, Capt. John Smith hoped to find the city or country; and for a long time, down nearly to the end of the seventeenth century, the name of Norumbega appeared on Dutch maps. It appeared even on occasional maps of the eighteenth century. But at length it was to be found only in ancient history or geography, and in the name of a noble Hall set up by the public-spirited citizens of Bangor.

Let us look a little further at the foundation of the old story; we shall, after all, find it quite substantial.

Verrazano, in 1524, came up to the angle of the Charles at Cambridge City Cemetery, near the remains of the then still standing Nornan Villa, on Maiollo's map, which seems to have occupied the site of Leif's houses. He found and left us the name Norumbega in —*oranbega*,— the initial *N* accidentally obliterated from the map, and the *m* of the second syllable

replaced by *n*, as given on his brother's map, — near the ancient St. John's Harbor, our modern Gloucester. Not far from Cape Ann, on the local map of Essex County of to-day, we have Norman's Ö, uniformly called Norman's Woe, and also Norman's Cove, of palpable Norse derivation. We have thus, from an early date, evidences that Northmen have been on our coast.<sup>1</sup> Gomez came to Massachusetts Bay in 1525, and Capt. John Rut to St. John's Harbor (Gloucester) in 1527.

A little later Parmentier, in 1539, found the name Norumbega applied to a land lying southwest-a-quarterwest from Cape Breton. Allefonsce under Roberval, in 1543, determined the great fact (the source and the explanation of countless mistakes in cartography) of there being *two* Cape Bretons, of which the more southern, referred to by Parmentier, was in the forty-third degree, and identical with Cape Ann. Within the limits of this forty-third degree was a river, at the mouth of which, according to Allefonsce, were many rocks and islands (Minot's Ledge, Cohasset rocks, the Lizard, the Roaring Bulls, the Graves, etc.), up which river, as Allefonsce estimated, "*fifteen leagues from the mouth, was a city which is called Norumbegue.*" "*There was,*" he said, "*a fine people*" at the city; "*and they had furs of many animals, and wore mantles of marten skins.*"

Allefonsce, a pilot by profession, has never been doubted. On him, more than on any one else, rest the identity of one of the Cape Bretons with Cape Ann, and the fact of there being a river, with a city on its banks, both bearing the name Norumbegue, between Cape Ann and Cape Cod. I procured from the Bibliothèque Nationale photographic copies of the original pen-made maps, and manuscripts of Allefonsce, that I might consult him in the original. There is no room whatever for question that a few leagues up a river having many rocks and islands at its mouth, in the forty-third degree, there was in 1543 a fine city called Norumbegue. I might cite many authorities, if time permitted.<sup>2</sup>

<sup>1</sup> We have other names of Norse derivation in Massachusetts; as for example, Nauset, Naumkeag, Naumbeak, Namskaket, and Amoskeag.

<sup>2</sup> Among them are Ptolemy, Ramusio, Mercator, Lok, Maginn, Plancie, Solis, and Hakluyt.

Wytfliet, in 1597, in an augment to Ptolemy, says: "Norumbega, a beautiful city, and a grand river are well known." He gives on his map a picture of a settlement, or villa, at the junction of two streams, one of which is the Rio Grande. Here, as we shall later see, was a *great fishery*, and of course dwellings and appurtenances to domestic life for persons engaged in the industry. I have framed into the Tower the stone mortar in use at the settlement. Wytfliet on his map had confounded the humbler settlement with the city, — perhaps merged the latter in the former.

Thevet in his text places "Fort Norumbegue" at the point where the Tower stands, and where Wytfliet placed the city, — at the junction of two streams; and so the two together led me into temporary misapprehension. The fort was occupied in Thevet's time as a trading-post by the Breton French. To them he ascribed the construction of the fort. Thevet says (I read from my copy of the "Cosmographie" open before me): "To the north of Virginia is Norumbega, which is well known as a beautiful city, and a great river; still one cannot find whence its name is derived, for the natives call it Agguncia.<sup>1</sup> At the entrance of the river there is an island very convenient for the fishery." He describes the fort as surrounded by fresh water and at the junction of two streams. The *City of Norumbega* on his elaborate map was *lower* down the river.<sup>2</sup> The French who occupied the fort called it Fort Norumbegue. It was surrounded both by a ditch and a stockade. The ditch remains.

It was largely what Allefonsce (1543) and Thevet (1556), who were on our coast as explorers, wrote, and what was pictured on Wytfliet's map, that led to my finding the fort. When I had deduced from the literature of geography that the fort was at the mouth of Stony Brook, I drove directly there, and found it on my first visit.

But I early found, besides the fort, the evidences, long unintelligible to me, of a great industry (to which I have alluded), involving, among other

<sup>1</sup> Iroquois for "head," — which applies to a great rock in the margin of the pavement of the fisheries, and now at one end of the reservoir dam of the Cambridge Water Works.

<sup>2</sup> The settlement at the junction of the two streams, and the site of the city lower down are given on the maps of both Thevet and Mercator.

things, *graded areas some four acres in extent, paved with field boulders.* It was a most extraordinary display, to which I may later again refer.

As already remarked, after Champlain,—known, as he was, as a most competent explorer and conscientious man, whose itinerary was most full and clear and painstaking, and whose maps were without precedent for palpable evidences of care,—after Champlain and the publication of his unsuccessful exploration of the Penobscot, belief in the existence of the City of Norumbega came to be generally less confident, and finally, as Dr. Palfrey's "History" shows, to be practically abandoned.

To one modern writer more than to any other we are indebted for keeping the story of Norumbega alive. Rev. Dr. De Costa, at that time editor of the "American Magazine of History," wrote and published a few years ago the most fascinating story of the "Lost City of New England." He wrote and printed several papers, gathering together for preservation the scattered fragments of legends and history bearing on the subject. His conviction, however, like that of Champlain and the later personal explorers, except Allefonsce and Thevet, was that if the ruins of the city were ever to be anywhere found, they would be found on the Penobscot, where our grand old Poet placed the "Barbaric City."

Yet every rood of the Penobscot to its extreme source has been scoured in the search, and no trace of the remains of a city has been found. There still exist on that noble river evidences of what the story grew from which was told to Champlain,—among them the name of Nolambeghe, preserved or known to the Indians of to-day (Vetromille), and the name Baya del Loreme on many ancient maps, as well as other names of Norse derivation on local maps of Maine; but time will not permit us to pursue them.

As the lost city was not on the Penobscot, and as it was not thought possible that it could have been elsewhere, the search was at last given up. So Norumbega was lost. In view of the great interests involved, one might almost wish—say you?—that it could have remained lost for a few years longer.

In my judgment, however, if it were possible, in addition to the dis-





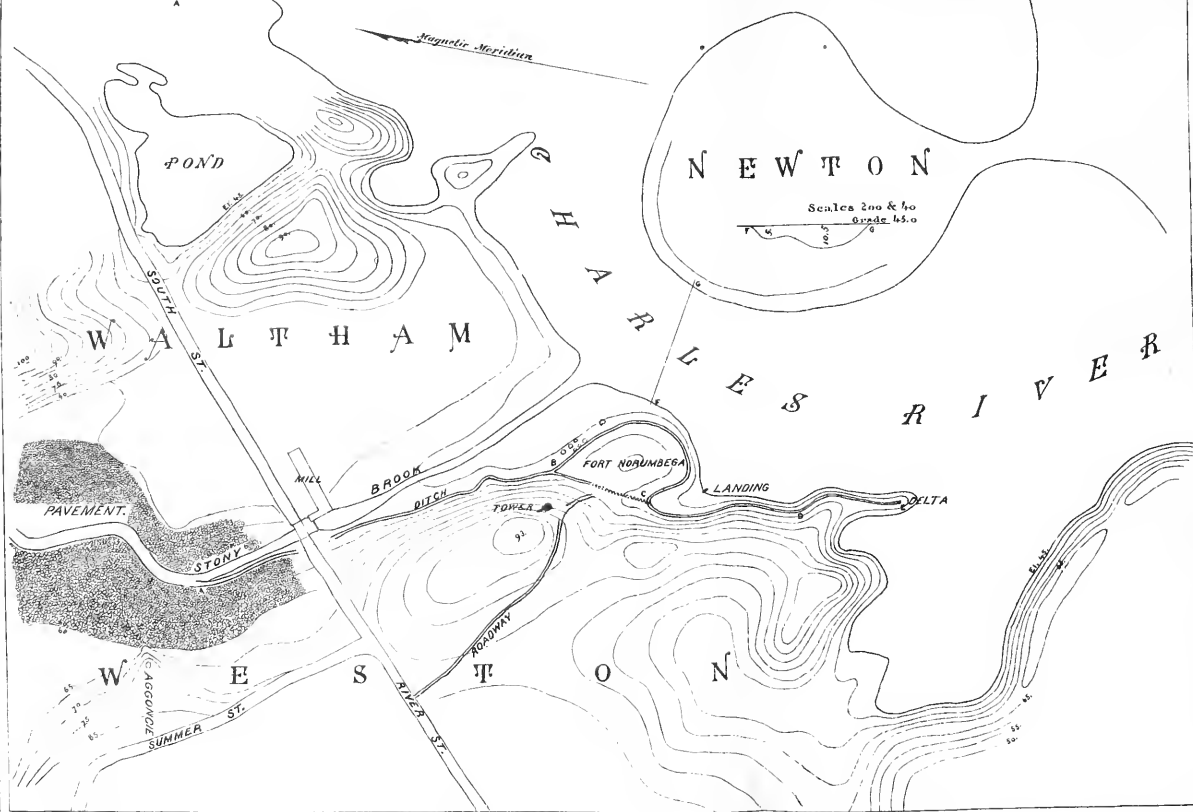
# PLAN OF NORUMBEGA FROM SURVEYS

By Geo. Davis, Civil Engineer.

1886



Magnetic Meridian



# PLAN OF NORUMBEGA FROM

BY GEO. DAVIS

SCALE OF PLAN





covery by the Northmen, to prove that the Phœnicians visited and long occupied parts of this country, or that this country was the Atalantis of Pliny and Solon, — either or both of them would dim, by the measure of the faintest Indian-summer haze only, the transcendent glory of the life-work of Columbus.

But there was another country lost, — lost from a still earlier period. This was *Vinland*. Or it may perhaps more correctly be said that it is only recently that it has been discovered and demonstrated that there was certainly a country hereabout to which the Northmen came, nine hundred years ago.

Do you anticipate me by exclaiming that Vinland and Norumbega are one?

But between such conclusion and the date of the earlier conviction of what might be found by research lay five years of almost constant study and personal exploration, with the co-operation of the engineer and draughtsman and photographer at almost every step. I only felt that I saw the end almost from the beginning, and lodged a caveat five years ago in connection with the Norse name of Cape Cod, — Kjalarnes, — and waited. I repeated my conviction with purposed vagueness more than once in my address at the unveiling of the statue to Leif in Boston two years ago. And if I tell you now that I have found the ancient city of Norumbega, as well as the *fort* and the *river* and the *country* of Norumbega, and learned somewhat of their marvellous history, — it will, I hope, help to give you courage to bear with me in the unfolding of a relation which I cannot hope much to modify or shorten.

Let me tell you of a little prediction that I made at a certain early stage of my research, which if my reasoning from data discovered were correct, must be realized. It was the test of the trustworthiness of my method of research. I said to myself and to my household: "If I am correct, every tributary to the Charles will be found to have, or to have had, a dam and a pond, or their equivalent, at or near its mouth or along its course." That was my prophecy. One may study at leisure its

fulfilment on either side of the river from its mouth to its source. It was long after this prediction that I found its verification at every point I examined, even as far as fifty miles from its mouth along the Charles, in Millis; and, farther still, in Holliston. The reasoning that led up to necessary dams and ponds at or near the mouths of the tributaries led with like force to a great dam on the Charles itself; and that also is open to your study.

On the Tablet of the Tower one may read that Norumbega was the name of a fort at the base of the Tower, of the river flowing past us, of a city on its banks, and of a country that reaches from Long Island Sound to the St. Lawrence; and that memorials of the people who occupied the country are strewn throughout this vast region. And now to be still more specific, I may say there is not a square mile of the basin of the Charles that does not contain incontestable traces of these people, which traces will presently be as obvious to others as they now are to me.

Shall I tell you at the outset why this has not been known before? It was a secret that, among other things, lay hidden in the signification of two or three Algonquin roots.

You are all familiar with the fact that the organs of speech of different persons and peoples differ more or less. Some lisp; the language of the Senecas scarcely requires the closing of the lips; the Narragansett language had no *r*; the Abenaki, rarely, *l*; the Hawaiian language, like the Italian, is marked by the frequent recurrence of vowels; *m* and *n* are sometimes confounded with each other, as *b* and *p* are, and, as the Chinese illustrate to us, *l* and *r*; so too *b* and *v*, *u* and *w*, are interchangeable.<sup>1</sup> The early settlers said Marvill Head where we say Marble Head.<sup>2</sup> The Dutch have difficulty with the English *u*, *v*, and *w*. The German has difficulty with our pronunciation, and we with his.

Long ago—he has been dead a hundred years—a Moravian missionary, Zeisberger, a German, came to this country, and noted a peculiarity

<sup>1</sup> Roger Williams noticed among the tribes of Indians, even in places within forty miles square of area, that *l*, *n*, and *r* were dialectic equivalents in the Indian name of "dog."

<sup>2</sup> See Wood's *New England's Prospect*.

9





# MAP OF THE CITY OF NEWTON.

Published by  
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WORCESTER, 1889

*E. S. Gardner Del. Newton.*



OFFICE OF THE  
COMMISSIONER OF THE  
LAND OFFICE  
WASHINGTON, D. C.

RECEIVED  
JAN 11 1891



in Algonquin speech. Heckewelder, another German, remarked the same thing. Dencke<sup>1</sup> observed it. Du Ponceau, a Frenchman, noticed it. This peculiarity was that the Indians of the tribes of the Algonquin family, which prevailed throughout New England, could not, — I beg you especially to remark it, — could not utter the sound of *b* without prefixing to it the sound of *m*; so that in uttering *bí*, the word that means “water,” the Indians said *mbí*, — just as the Latins, possibly preserving the same root *mbi* (autochthonous of old), said *imbibo*, “to imbibe or drink;” just as the Greek sailors who come to our capital city speak of coming to *mBoston*; just as in Central and South America and in great portions of Africa one may find to-day in names of persons and places *b* preceded by *m*. (See Stanley’s names, and Du Chaillu’s and Brinton’s, and names in missionary records.)

Many hundred years ago the country we call Norway was called Norbega<sup>2</sup> and Norobega,<sup>3</sup> which are the same philologically — as we have just seen — as Noruega, or Norvega, or Norwega; the *b* is the equivalent of *u*, or *v*, or *w*.

The people of Norway settling in a newly discovered country claimed the sovereignty of that country. Vinland belonged to Norway, — that is, Norbega. But the Indians among whom the Norwegians came, could not, as we have seen, utter the sound of *b* without putting the sound of *m* before it. They could not readily say *Norbega*, but said, because it was easier of utterance, *Nor’mbega*. This was the name later given by the natives wherever along the coast, from Cape Cod to the St. Lawrence, explorers asked the name of the country occupied by the Norwegians. In answer to such questions the natives gave the name that had so long before been conferred, — *Nor’mbega*. This name seems to have been used in the sense of “belonging to Norway.” Portuguese, Spanish, Italian, French, Dutch, and English navigators coming to our shores spelled the name *Nor’mbega* variously. So we had *Norumbega*; we had the *u* in it replaced by *o*, *a*, *e*, and *i*; and we had *bega* replaced by *begue* and *bec* and *bagea*, etc.

<sup>1</sup> A missionary to the Lénape Indians of Canada.

<sup>2</sup> See Bordone.

<sup>3</sup> See Maginn.

Champlain (1612) left the name of the country about the Penobscot *Norumbegue*. On one map only have I found *Nerëmbega*. On three maps, obviously copies of a common original, I have found at the same point, respectively, *Norvega*, *Noruega*, and *Norumbega*.<sup>1</sup> These three names on the separate maps were all alike in Nova Francia (New France).

Now, in 1524, after the Northmen in the basin of the Charles had moved northward, pursuing their industries along the coast, some naturally becoming merged in the Indian people, Verrazano, the Italian explorer under Francis I. and Madame the Regent of France, came here and saw traces of the former presence of the Northmen. There is recorded on his maps (Maiollo's and that of his brother Hieronymus Verrazano) Norman Villa,<sup>2</sup> and Anorobagea, and -oranbega.<sup>3</sup> Allefonsce's visit was later, in 1543; and he found the city and river of Norumbegue in the forty-third degree. Thevet came later still, and found in the same degree the river, city, and fort, of Norumbega. These navigators and discoverers were all in the service of France. Breton French traders occupied the fort when Thevet was in this region. This portion of Massachusetts had been called Francesca and Gallia by Verrazano, and Terra de la Franciscane by Allefonsce. This was the *earliest* New France, — Nova Francia, — the name which Jacques Cartier in 1534-1535 extended over the shores of the St. Lawrence, the story of which we have in the works of Dr. Parkman. The Dauphin map (1542-1543) confounded, as Sebastian Cabot's of 1544 did, the southern with the northern Cape Breton, or rather fused the two in one.<sup>4</sup> It was Allefonsce, the pilot of Roberval, who in 1543 left, in the manuscript to

<sup>1</sup> Norvega was Norbega, as Sevastopol was Sebastopol, or as Rivero was Ribero; and Norbega became Nor'mbega, as Boston becomes 'mBoston. Grotius and Forster recognized the possible identity of Norvega with Norumbega, as has Beauvois in recent times.

<sup>2</sup> Norman Villa is also on the Ulpius Globe in the same latitude.

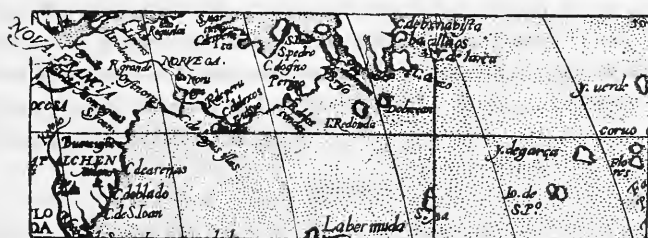
<sup>3</sup> Norman's Woe occupies the site of, or is near to, the (N)oranbega of Verrazano. Not far away was the dialectic equivalent Naambeak of John Smith, and its near fellow of Naumkeag, in use to-day, and Namskaket and Amoskeag, already mentioned; of close kinship, and in another direction, were Bogasto and Jar. Verrazano records the *lunga villa* — such were the houses of the Northmen — and the sweat-house, or *sto*, as it is preserved in Boga-sto, in the town of Millis.

<sup>4</sup> This is true of many others, including Vallard 1543, Diego Homem 1558, and Mercator of 1569.





ORTELIUS, 1570.



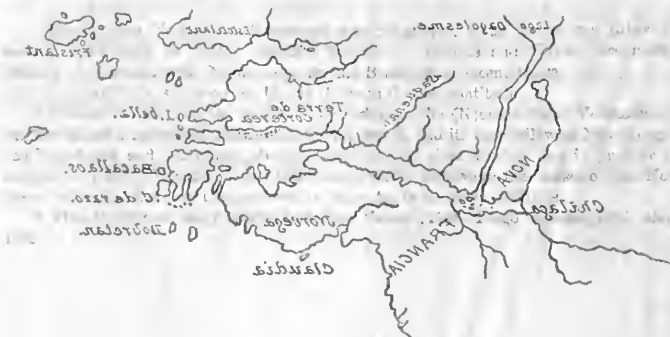
SOLIS. 1598



BOTERO, 1603.

"They sailed long until they came to a river, which flowed from the land through a lake and passed into the sea."  
Thorfinn's Saga.

"The French diplomatists always remembered that Boston was built within the original limits of New France" (*Bancroft's History*, 2d edition, p. 24).



БОТРО, ГОЗ.

“They sailed long until they came to a river, which flowed from the land through a lake and passed into the sea.”  
Theophilus says.

*"The French diplomats always remembered that Boston was built within the original limits of New France" (Barrow's History, 2d edition, p. 24).*

which I have referred, the record of his discovery that there were *two Cape Bretons*. It is this original manuscript—of which I have with its pen-made maps the absolute copy—that has determined the site of the treasures of the forty-third degree.

*This Allefonsce manuscript determined our Cape Ann to be the southern Cape Breton.* It determined the river Charles to be the Norumbega. That is, the river Norumbega was in the forty-third degree; it was a tidal river (Verrazano and Thorfinn). "It is at its mouth full of islands which stretch out ten or twelve leagues to the sea."<sup>1</sup> Of such a tidal river *there is but one* in the forty-third degree.

On the maps of which I spoke, where, at the same point and given as the alternative names of the city, *Norumbega*, *Norvega*, and *Noruega* are found, and where *Norvega* as a *province* occurs, there is also, and in the same precise latitude, the *Norumbega River*. This was the Rio Grande of the Portuguese, the Anguileme of Verrazano, the Mishaum (Big Eel) of the Massachusetts Indians, and the Charles of Capt. John Smith. Over all, in larger print, on these maps, is the historic name of

#### NOVA FRANCIA.

Of this New France Mr. Bancroft, our great historian, says: "THE FRENCH DIPLOMATS NEVER FAILED TO REMEMBER THAT BOSTON WAS WITHIN THE LIMITS OF THE ORIGINAL NEW FRANCE."

#### HERE WAS THE ORIGINAL NEW FRANCE.

If Boston was in New France; and if the river Norumbega (the Charles), and the city of Norumbega and the fort of Norumbega, on the banks of the Charles, were all in New France as well as in the country of Norumbega, and in the forty-third degree,—then we cannot be in doubt as to where the Northmen came nine hundred years ago. As I have demonstrated elsewhere that Leif's houses were farther down the Charles, we cannot doubt that the Vinland of Leif was near the city of Norumbega of history,

<sup>1</sup> Allefonsce's mouth of the Charles had possibly an estimated width of "above forty leagues," or the mouth may have been "above forty degrees" of latitude.

tradition, and song. So eastern Massachusetts held both Vinland and the ancient city and seaport and river and fort of Norumbega.

It is, as the French tell us, the unexpected that happens. I found my guide to the city in a single sentence in one of the sagas of Thorfinn Karlsefni, which appears, by an oversight of the scribe or copyist possibly, attached to the story of Freydis. Let me give the substance of it.

Leif had built houses near Gerry's Landing, and called the country Vinland, and returned to Greenland. Thorwald had come to Leif's houses, had explored the Charles, had found in it many shallows and islands, and a cornshed on an island far to the west; had consumed a summer in his discoveries, and returned to Leif's houses in the autumn. In attempting exploration at sea he had been wrecked on Cape Cod, had repaired his ship and set up the old keel in the sand, and called the cape Kjalar-nes (Keel cape); he had been killed in battle with the Indians, and buried on the Gurnet. His crew had returned to Greenland to be succeeded by Thorfinn, who remained three years in Vinland, and because of Indian distrust and opposition gave up the attempt to settle the country.

Thorfinn in his richly laden ship had returned with his wife Gudrid and his little boy Snorri to Greenland and to Norway; had passed the winter in the society of the Court at Nidaros, the residence of the king, not far from the modern Thronheim. As he was ready to take his departure for Iceland, his future home, waiting at the wharf for a favoring wind, there came to the ship a Bremen merchant who wished to buy his *husa-snotra*. Thorfinn did not care to part with it. "*I will not sell*," said he. "*I offer you a pound of gold* [Beamish says, *a half-mark of gold*]," said the Southerner. "*Karlsefni* [Thorfinn Karlsefni] *thought this a good offer, and closed the bargain. The German then went away with the husa-snotra. But Karlsefni knew not what wood was in it! It was MÖSURN from Vinland!*"

Beamish estimated a half-mark of gold at £16 sterling, or about \$80 of our money (and much more, expressed by modern values of service or products of labor). What a sum for an article of household use, the chief

value of which was in its wood! What could *mösurr wood* be? And what was a *husa-snotra*?

About the latter there has been endless speculation. *Husa* obviously was related to *house*; but what did *snotra* mean? One writer thought it a besom; another, a broom-handle; another, a bar to fasten the door from within. It might be a weathercock, a crown, a piece of decorative carving in wood. None were satisfactory. Professor Vigfusson — the late Icelandic Professor at Oxford — came to the conviction that it was an ancient Finnish word, now obsolete.

The “Antiquitates Americanæ” had been translated into Danish and Latin by Rafn, and most Vinland students had seen the Vinland Sagas either in the original or in one or the other of these two translations. I had not met a reference, in connection with the discussion of *husa-snotra*, to the summary of the Vinland Sagas in Peringskjöld’s translation of the Heimskringla of Snorro Sturleson into Swedish and Latin.<sup>1</sup> Might there not be another rendering in Swedish? I learned of a copy of the first edition of Peringskjöld’s Heimskringla of 1697 in Stockholm, and was fortunately able to obtain it. In this, *husa-snotra* was translated *wag*<sup>2</sup> in Swedish; into Latin by *statera*, or *statera lignea*, “wooden scales” (scale-pans). The *husa-snotra* had possibly (probably) been wrought, or repaired (at least the scale-pans), by a sailor on his home voyage from Vinland, and presented to Thorfinn. *It was a pair of house-scales, the scale-pans of which were of mösurr-wood.*<sup>3</sup> The *husa-snotra* was the equivalent of the house steelyard for weighing.

Here is the significant sentence in the Saga: —

“Thorfinn had wood *felled* and *hewn* and brought to the ship, and the wood piled on the cliff to dry.” (See Cabot’s translation.)

Let us study it.

It was *felled*. It was part of a *grown tree*.

It was *hewn*, to remove useless weight.<sup>4</sup>

<sup>1</sup> The same as in the “Codex Flatiënsis,” incorporated in the “Antiquitates Americanæ” of Rafn, and translated by Beamish.

<sup>2</sup> Pronounced *woag*, like *goad*.

<sup>3</sup> Scale-pans of bronze are found in Sweden, of the bronze age. (Montelius, p. 114.)

<sup>4</sup> Leif also “*hewed* the cargo of wood for his vessel.”

It was *piled* on the cliff to *dry*. Why? *Because it was wet. It had been in the water.* It had been cast into the river, or a tributary to it, *above* the ship.

It had been *float*ed to the ship. It had been fished out and *carried* to the cliff by hand.

It was in *blocks* that men could carry.

It had been *piled* so as to be convenient for sliding to the ship, at the base of the bluff, when ready to receive its cargo.

In these terms of analysis I found what led to the discovery of the desert's secret,—the ancient City of Norumbega. I saw—afar off, to be sure—what the Norman Knight almost saw in a mirage among the gorgeous clouds that sometimes gather about the setting sun.

My study was at last rewarded. I had delved to the heart of the problem. As I look back upon the experience, I think it may not have been altogether a playful fiction that I uttered to myself, when glancing down the vista before me I said, "I have not only reached the heart of the problem, but I can feel its beat."

Mösur wood, as I will presently explain to you, was the burrs or large warts that occasionally grow on certain trees, more frequently found in primitive forests,—as oak (one variety is called burr oak), birch, hickory, maple, ash. (Mösur wood = *Knorrige Auswuchs*, Old German.)

I have said there were monuments of the presence of the Northmen on every square mile of the basin of the Charles. I find I must at once tell you what these monuments are.

We have no account of transportation by the Northmen except by water. The mösur wood gathered by Thorfinn, we have just seen, was *float*ed to the ship, which lay in the Charles, and then taken from the water to be piled on a cliff, a bluff, a bank, out of the reach of high tide, to dry. We will assume what I cannot now stop to dwell on,—I have discussed it elsewhere at length,—that the spot where this occurred in Thorfinn's experience was at or near Gerry's Landing, just above the ancient bluff known as Symond's Hill, by the river (the site of Leif's houses), near the City Hospital. That was the spot where a great industry in Vinland began. The mösur blocks



BURRS ON OAK TREES ON THE LINE OF DITCH LEADING TO THORFINN'S LANDING.









Stone Wall and Canal or Ditch near Norse Dam.



Stone Wall and Canal near the Norse Dam and Sibley's Station, Fitchburg R. R.

were *felled* and *hewn* at first along the neighboring bluffs on the Charles. At the base of these bluffs *are still ditches, or canals*, into which the blocks may have been rolled, and along which, after the ditches were filled with the water at high tide, the blocks floated down to where the ship lay. The ship was the *gathering-place*. The blocks had been "*brought to the ship*." They were not taken on board immediately, but were removed from the water, and *carried by hand and piled on a cliff to dry*. When the immediate shores of the river had been exhausted of the mösur wood, the shores of the tributaries flowing into the river became the field of activity, and the mösur blocks were sent floating down the streams; and where the streams were remote from the bases of the slopes on either side, and sources of water were at hand, canals, or nearly level troughs, were dug to transport the blocks to the streams, and ultimately to the Charles. We now see why dams and ponds were necessary at the mouths of the streams, to prevent the blocks from going down the Charles without a convoy, and out to sea to be lost. Consider as an example the pond at the mouth of the Coldspring Brook opposite Watertown. I call its artificial wall below a *boom-dam*. It is a good example. There is another striking one just below Newton Upper Falls, on the left bank, through the ridge. The volume of water of the stream spread out against the dam would become, on the brow, too shallow for the blocks to pass over. They would thus be saved as logs are, by a boom across a stream down which they are floating.

There is an admirable *canal*, walled on one side for a thousand feet, along the west bank of Stony Brook, in the woods above the Fitchburg Railroad Crossing between Waltham and Weston. The Cheesecake Brook is another, and Coldspring Brook another. There is an interesting dry canal near Murray Street, not far from Newtonville. It may be seen from the railway-cars on the right, a little to the east of Eddy Street, approaching Boston. The forts—dwelling-places surrounded by water, and in their day also by stockades—gave examples of ditches such as we have surrounding the ancient fort, near the Tower.

The canals, ditches, deltas, boom-dams, ponds, fish-ways, forts, dwellings,

walls, terraces of theatre and amphitheatre, scattered throughout the basin of the Charles, are the memorials I had in mind when I said there was not a square mile draining into the river that lacked an incontestable monument of the presence of the Northmen.

To make clearer our conception of the picture I am trying to present, let us follow an individual block of *mösur* wood.

I have spoken of the canals at the base of the hillsides along the tributaries to the Charles. The block of *mösur* wood we will follow shall be the burr, or wart, growing on an oak near the top of the slope along Stony Brook, a quarter of a mile above the Fitchburg Crossing between Waltham and Weston. The tree on which the burr grows is felled by the axe, and the trunk above and below the burr cut off. The wood of the trunk portion of the block is hewn away, to reduce its weight and size. The block, so shorn and shaped, is rolled down the hill till it reaches the canal, where it floats with other blocks, rolled down by other choppers, in a sluggish current, to be discharged at the outlet into Stony Brook, or on a delta as at the end of the ditch near the Tower, which is on a little ridge projecting into the bay, or *bega* (literally a *norumbega*).<sup>1</sup>

The discharge on the delta permitted assortment before making up the rafts that were to descend the Charles. This detention would enable each chopper, at intervals, to select and mark the fruit of his labor, or each contractor to gather and identify the results of the work of his several axemen. There were evidences, before the reservoir was established, of boom-dams and ponds on Stony Brook at various points above, which might have been used for marking or assorting and rafting the burrs. Once in the Charles, the rafts would descend to the required great boom-dam at the seaport of Norumbega, wherever that might be.

Do some think that I have given undeserved dignity to the ditches in calling them canals? They are so named in the old deeds in Weston. If

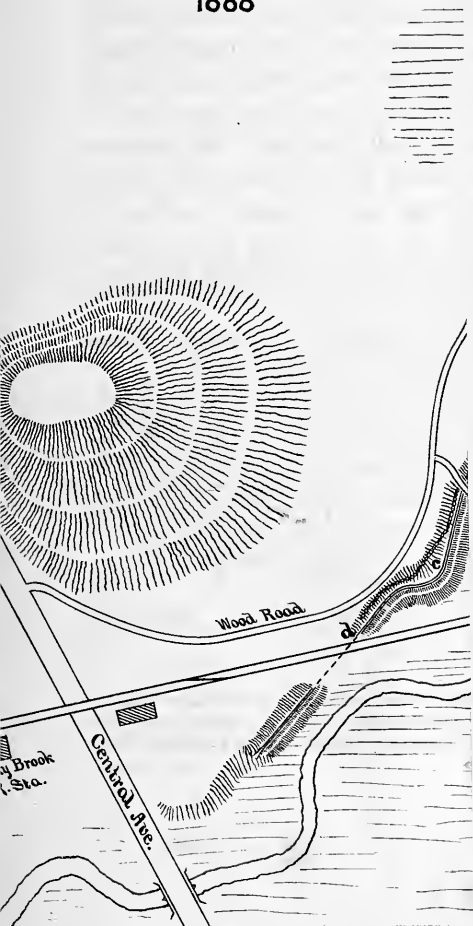
<sup>1</sup> The Norse and Algonquin have common elements. I was at first surprised and then delighted with this coincidence. It points to deeper truth. The roots *no* and *bi* and the utterance *ug* are common to Norse and Algonquin, and many other languages, classic and aboriginal. But this will be discussed at length elsewhere.

Plan  
of  
**EARTH WORKS**  
above  
STONY BROOK STATION

Scale

0 50 100 200 300 400 500 ft.

1888





**Scale**

0    50   100    200    300    400    500 ft.

1888



of  
 Plans  
**EARTH WORKS**  
 above  
 STONY BROOK STATION

Scale

0 100 200 300 400 500 600 700 800 900 1000

1888





you look at them on the left of the highway between Sibley's and Weston, with the stone walls on either side, you will not wonder that the word "canal" as well as "ditch" should have suggested itself. They are so called on the published town maps of Millis and Holliston, many miles above us.<sup>1</sup>

Now let us return to the sentences in the Saga of Thorfinn that have held such vast secrets.

It was, we remember, a single article of domestic use, in part composed of wood, which was paid for with £16 sterling (Beamish), — a sum which in modern equivalents of labor would be several times greater! It must have been something valued by the travelling Bremen merchant, not because of its association with Thorfinn, but for something else, to a merchant, of vastly greater moment. Let us assume for the occasion, what we shall presently find fully sustained, that it was because it suggested the basis of an *industrial adventure*. What then was it that gave value to the

#### MÖSUR WOOD ?

In the last canto of "The Lord of the Isles" occurs the couplet (it is King James who speaks at the banquet), —

" 'Bring here,' he said, 'the mäsers four  
My noble fathers loved of yore.' "

A reference to the appendix of the edition of Scott edited by Lockhart reveals that these "mäsers" were wooden *drinking-cups* — flagons, beakers — mounted in silver, and kept by King Robert the Bruce as heirlooms in an iron chest, with other bric-a-brac, gold and silver ornaments, and the royal treasure.

Mäser wood was employed in the manufacture of communion cups for church service, — chalices, — and is mentioned in inventories of ancient cathedrals. It is also mentioned by Spenser, —

"A mighty mazer bowl of wine was set."

<sup>1</sup> A friend who has repeatedly rowed his canoe from Cambridge up the Charles for seventy-five miles and then returned by the same route, informed me, without knowing of my having written of the ditches or their office, that numerous canals were observed by him to enter the Charles. One in particular, near Dedham, called the "*line ditch*," cut off a bend of eight miles, traversing a swamp, and is a mile in length.

And here is another allusion to it by Ben Jonson,

“ All that Hybla's hives do yield  
Were into one broad mazer fill'd.”

On going back to the root of the word, it proves to be the same as that of *mass*, and originated in the process by which cereal flour and water could, with kneading, be made to increase in size and become a *mass*. (Skeat.) The moistened gluten became adhesive; more flour would cling; and so, by alternate additions of water and flour and kneading, the dough would increase in volume. From this came the name *maza*, which the Spanish give to the dough of corn-meal,—a word in use in Mexico to-day, and the source of the specific botanical name of Indian corn in *Zea mais*. The word in St. Domingo is *mahez*. The early Pilgrims heard of it as *Indian maizum*. The kneading gave to the flour and water mixed a fibrous, interlacing texture, which bound the whole together. This, unfermented and slightly baked, was the *mass*, which gave its name to the Sacraments in which it served. Mäser wood possessed this texture. *Mäser*, or *mazur*, or *mösür* wood is defined, in Old High German, as “warty outgrowth from trees,”—we call them burrs, or borls. It could be wrought into thin forms, and would not *readily crack or split*. The Swedes had scale-pans for weighing made of this wood, thin and light, and also plates and trenchers and kneading-troughs and bowls and goblets. Mäser wood is still used in this country to make mortars for grinding pepper, cinnamon, and the like in domestic service; also for kneading-troughs. There was a factory for wooden mortars and other products of the turning-lathe on Chester Brook,—Mead's.<sup>1</sup> This wood may have been used more or less in the Old World in place of the costly bronze and perishable glass and earthenware,—great wants of civilization.<sup>2</sup> In ancient and very early times it was used for war-clubs. A small growth of stem surrounded by a ring of the mäser

<sup>1</sup> Burrs are found of large size and numerous near Cotuit, Barnstable County, and also in the highlands near Amherst. I have found them occasionally on oak-trees in the forests along Stony Brook and at points farther up the Charles.

<sup>2</sup> Such use is still widespread in Ireland and Scotland, once parts of Ancient Norway.

growth was easily converted into a war-club,—the club of Hercules. (Larousse.) It became the symbol of command carried by the leader, and was the foundation of a usage, or fashion, that prevails to this day, and preserves the use of the word in the *mace*, borne before the Speaker of the House of Commons as well as of the American Congress,—before the Lord Mayor, the Lord Chancellor, and so on.<sup>1</sup> It gave the name to the companion of the billiard cue. We see traces of this word in the *maze* of the dance and the *maze* of a labyrinth; in *mazurka*, the Polish dance; in *macerate* and *massage*, processes of kneading (see also *master* and *measure*; also the *mass*,—a unit in liquid measures in some of the States of Germany).

Now, *māser* wood was tough, lasting, decorative; did not grow everywhere and on all trees; was sought for, and paid for generously, by the Church, the aristocracy, the municipality, the government, and for domestic uses. It had already naturally become relatively scarce in Europe. It was a form of wood-growth that pointed possibly to the old age of the forest.<sup>2</sup> A virgin supply would be a prize to be laid before enterprising merchants, wood-dealers, and decorators of houses and furniture. Leif and Freydis knew of its value, as also Thorfinn, and it was their principal cargo on leaving Vinland. The Bremen merchant was conversant with the wants of civilization and the methods of enterprise. Thorfinn did not notice, or take account of, the *māser scale-pans* of the *husa-snotra* from the point of view of the enterprising Southern man. He saw that the wood

<sup>1</sup> Certain officers of the Scotch Law Courts are called *macers*. See "The Heart of Midlothian."

<sup>2</sup> Here may have been the seed of expansion into a great industry, and a commerce with the New World conducted primarily and chiefly by or through the Northmen. We catch glimpses of its spread, possibly, in the ancient *Brazil* (*Ile Arbres*, island of woods), in *baccalaos* carried across the seas by the Basques, and in chance arrivals at other points in Europe. The Massachusetts Indians conceived the early English colonists could have come only for wood. But even in Thorfinn's time, in the account of Freydis, it is related that "the expedition to Vinland was commonly esteemed to be both lucrative and honorable." Her vessels, as we have seen, brought home wood from Vinland. Leif owed his added name—"the Lucky"—to having had the good fortune to save the crew of a wrecked ship loaded with *wood* on its way to Greenland. His own cargo was, in part, of *mōsur* wood. The importation of certain kinds of wood from the region of Vinland was already an established industry. Gudrid told the Pope at Rome of the Christian settlements by Scandinavians, already in her time, in Vinland. See also Adam von Bremen.

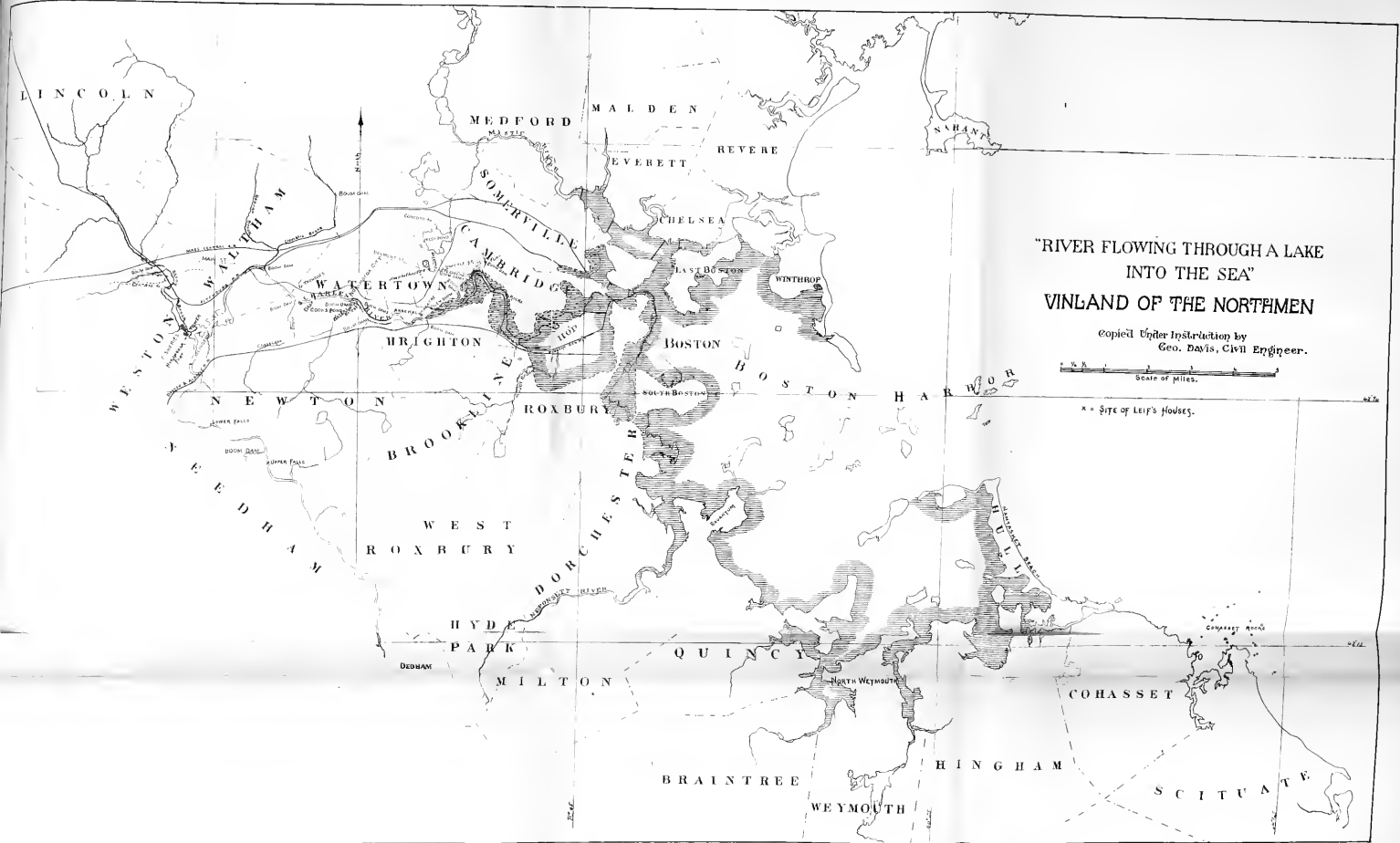
*could be wrought into thin forms, generally, without liability to crack or warp, and appreciated the significance of a new source of it.*

At first the māser wood could be gathered near the settlement, as we have seen; but the supply would soon be exhausted. The choppers must go farther. There were no horses, no roads. The obvious method of transportation was by water,—at first from the immediate wooded shores of the Charles, then from the shores of its tributaries, and then along artificial canals, conducting to these tributaries and the river. But to prevent the blocks from going out to sea, there must be dams at the mouths of the tributaries to arrest them. I had found many canals leading to tributaries and to the Charles, when I reflected that if I had rightly divined the office of these canals, there must be at the mouth of each tributary, or along the stream near and above it, a dam and pond, or the remains of them or their equivalents, wherever the industry of the māser wood was prosecuted by the Northmen. I have traced these dams up the Charles nearly to its extreme source. I have followed them on the Neponset and the Piscataqua, and on the tributaries to the Merrimac. I have found them tending southward to streams leading to Narragansett Bay. Not only the boom-dams at or near the mouths of the streams falling into the Charles, but the canals all over Newton and Weston, in Belmont and Watertown, and Woburn and Arlington and Medford and Cambridge, in Dedham and Millis and Holliston and elsewhere, are frequently walled with stone, as in the case of the Cheesecake, and of the Coldspring, where the Boston and Albany railroad crosses below Newtonville, and near the Catholic Theological Seminary in Brighton, and where the stream crosses the highway between Sibley's and Weston. Undoubtedly the walls have been repaired in modern times, and in some cases it will be difficult to distinguish between ancient canals and modern ditches for drainage. Some of the dams are very massive. In some cases the ponds have been more or less filled with alluvial deposit, and now constitute meadow-land, or a swamp, as at the mouth of the Cheesecake. In others a modern dam below has submerged the mouth of the stream,—in which cases the outline

"RIVER FLOWING THROUGH A LAKE  
INTO THE SEA"  
VINLAND OF THE NORTHMEN

Copied Under Instruction by





"RIVER FLOWING THROUGH A LAKE  
INTO THE SEA"  
VINLAND OF THE NORTHMEN

Copied Under Instruction by  
Geo. Davis, Civil Engineer.

Scale of Miles.

\* = Site of Leif's houses.





of the ancient dam is sometimes betrayed in the growth of shrubbery. In a few cases a canal ends in a delta,—as on Eddy Street in Newton near the fish-traps on the Cheesecake, and at the end of the canal near the Tower. In many cases the dam is accompanied by a fish-way,—as on the stream from Lexington to the Mystic, and on Mother Brook.

Along these canals and tributaries are artificial islands that once gave sites and protection to Norse homes,—as you may see near the railroad station at West Newton on the street toward the Lower Falls, and near Burroughs Pond. One is still indicated in the grounds of Hon. Chauncy Smith in Cambridge, in the broad mound around which a canal formerly conducted water from the slopes beyond Craigie Street. The original path of the modern Brattle Street crossed on the boom-dam below the pond into which the canal led, and which has only recently been filled. The dwellings had the additional protection of stockades, like the old fort near the Tower, occupied after the Northmen by the Breton French as a trading-post, as remarked by Thevet.

All these boom-dams at the entrance to the Charles point to a larger boom-dam *across* the Charles, where the total harvest of blocks from all the basins might be drawn from the water and piled to dry. That must have been near the place where they were shipped.

Do you ask now, Where did these blocks find place for shipment? When I answer that, I shall have turned aside the screen which has so long baffled the students of New England cartography, and shown you the site of the ancient city of Norumbega.

Go with me down the Charles from the Tower past Islington and Lily-Point Grove, and the great Watch Factory of Waltham, and the boom-dam at the mouth of Beaver Brook, now a pond filled with deposit from the brook, past the swamp at the mouth of the Cheesecake, past Bemis's Station, past the terraced hillside on the right, which is entitled to more study than I have been able to give to it, and at length we shall come to a stone dam over which the sweet water of the river pours to-day. This dam is made of field bowlders such as compose the beautiful new

churches in Weston, Watertown, and Wellesley, — not square-cornered stones, or split or hewn, or the product of drilling in the quarry and blasting, but like the larger stones of the Tower, adjusted to their more stable positions. It is at the head of tide-water. Within the memory of living men, once only has the incoming tide risen above the crest of the dam. It was when the easterly storm and tide and wind swept away the Minot's Ledge Light. With that single exception, — so I have been told, — the dam has been the dividing line between fresh water and salt at high tide.

Has it ever occurred to any one to ask how long that dam has been there? The Watertown Historical Society has just come into being, or it would not have been left till to-day to demand an answer to this question.

The earliest man of Winthrop's colony to ascend the Charles was Roger Clapp (1630). His story is a part of the history of Watertown. Let me repeat it to you. He describes the narrow, shallow rapids below,<sup>1</sup> which he reached, as he estimated, three leagues from the mouth of the river. His party found in the neighborhood an encampment of Indians, some three hundred by estimate, at the head of tide-water, where some of them were taking fish in the shallows above the tide-water.

Clapp observed the shallows at the head of tide-water at Watertown, and also shared the product of the devices used by the Indians for fishing purposes just below, which involved the descent and fall of the stream as early as 1630. Wood, who came to the country the year before Clapp, and left in August, 1633, and whose book ("New England's Prospect") bears date of 1634, wrote of the *fall of fresh waters* and the fishing at a weir below.

This fall and the fishing were mentioned by Josselyn in 1638. Later still, Dunton wrote of a "*great fall* of fresh waters which convey themselves into the ocean through the Charles River."

<sup>1</sup> The shallows — rapids at ebb-tide — prevented the explorers (Champlain perhaps among them) from ascending the Charles to the site of Norumbega. Heylin and others ascribe to the falls on the American rivers the failure more thoroughly to explore the interior. Had the explorers gone up at flood-tide, it might not have been left to our time to find Norumbega.



Dam, docks and wharves of the ancient city of Norumbega, at the site of Watertown, on the Charles.  
Discovered in 1889.



The weir fishing was continued by the whites, and the profit in later times divided between Watertown and Brighton down to 1860;<sup>1</sup> and I had the honor a few months ago to converse at length with the latest custodian of this industry, the present Town Clerk of Watertown, Mr. Ingram, who pointed out to me the theatre of the industry with the weir. He conducted me also to the oldest map of Watertown, in the Secretary of State's office in Boston; and on that I found traced the canal through which flowed the waters that turned, so it is said, the first wheel of the first flouring-mill of New England.

Let us look a little further. There may be some among us who have not heard of Roger Clapp, the first of the Puritans to reach the head of tide-water on the Charles; or possibly of Wood or Josselyn or Dunton, who wrote of the spot a few years later. But there is one of whom every son and daughter of New England has heard, John Winthrop,—the great leader of the Colony of Massachusetts Bay. He was the ancestor of the venerable scholar, statesman, orator, public servant, who—

“ In an old age serene and bright  
And lovely as a Lapland night ” —

is the living object of our reverent and grateful homage. John Winthrop records an incident in the history of the Colony that relates to the age of the dam at Watertown.

On the very spot where, according to popular belief,<sup>2</sup> the first flouring-mill in New England—possibly in America—was set up, now stands its efficient successor (more than one generation of mills between), still in active service, depending for its water-power upon the same difference of level between the water above the dam and below the mill, of which advantage was taken by the early colonists. The ancient mill was driven by an undershot wheel, as was the modern one, till the turbine

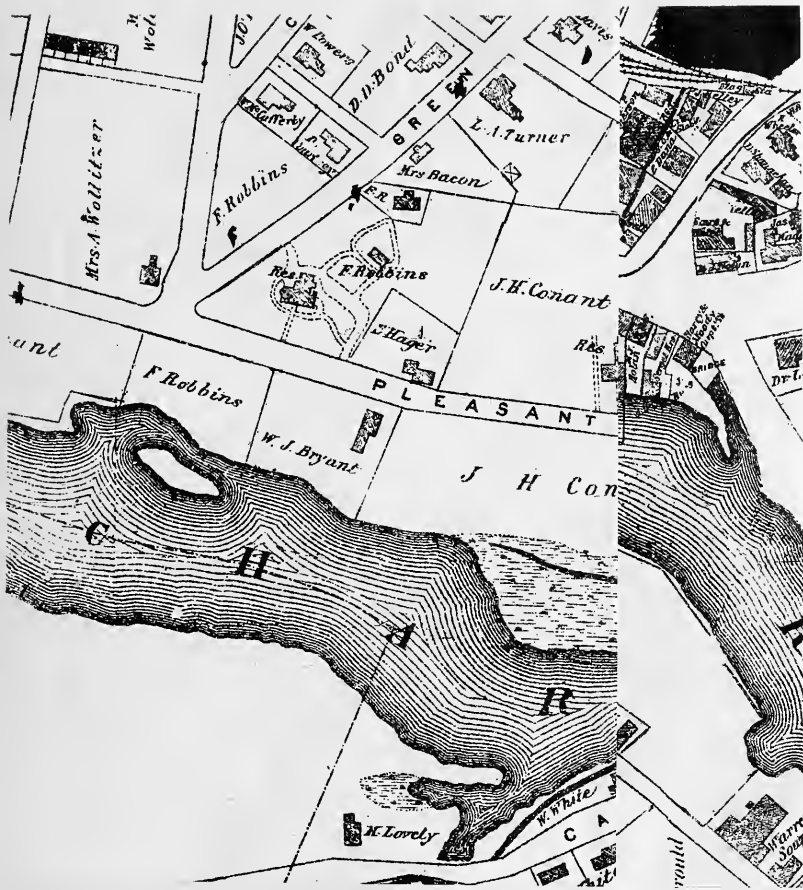
<sup>1</sup> See Nelson's History of Waltham.

<sup>2</sup> It may be that the mill-site at Watertown was the first which has been *continuously occupied* by a flouring-mill. Mill-stones were brought from England, and are mentioned in the cost of equipment for the colony.

came, the water passing under instead of over the wheel. It happened on one occasion that a little child fell into the raceway above the mill. Before the eyes, but beyond the rescue of the miller, the child floated into the flume above the wheel. An accident had removed one of the blades of the wheel. As Winthrop relates, a special Providence directed that the current should bring the child exactly into the place of the lost blade of the water-wheel,—“for otherwise,” he says, “if an eel pass through, it is cut asunder,”—so that when the miller reached the outlet of the flume, he found the child absolutely unharmed, sitting waist-deep in the water below. And now, as long as the history of the Massachusetts Bay Colony shall be read, so long will the story of the wonderful deliverance of the little child be remembered as an incident of the early life of Watertown.

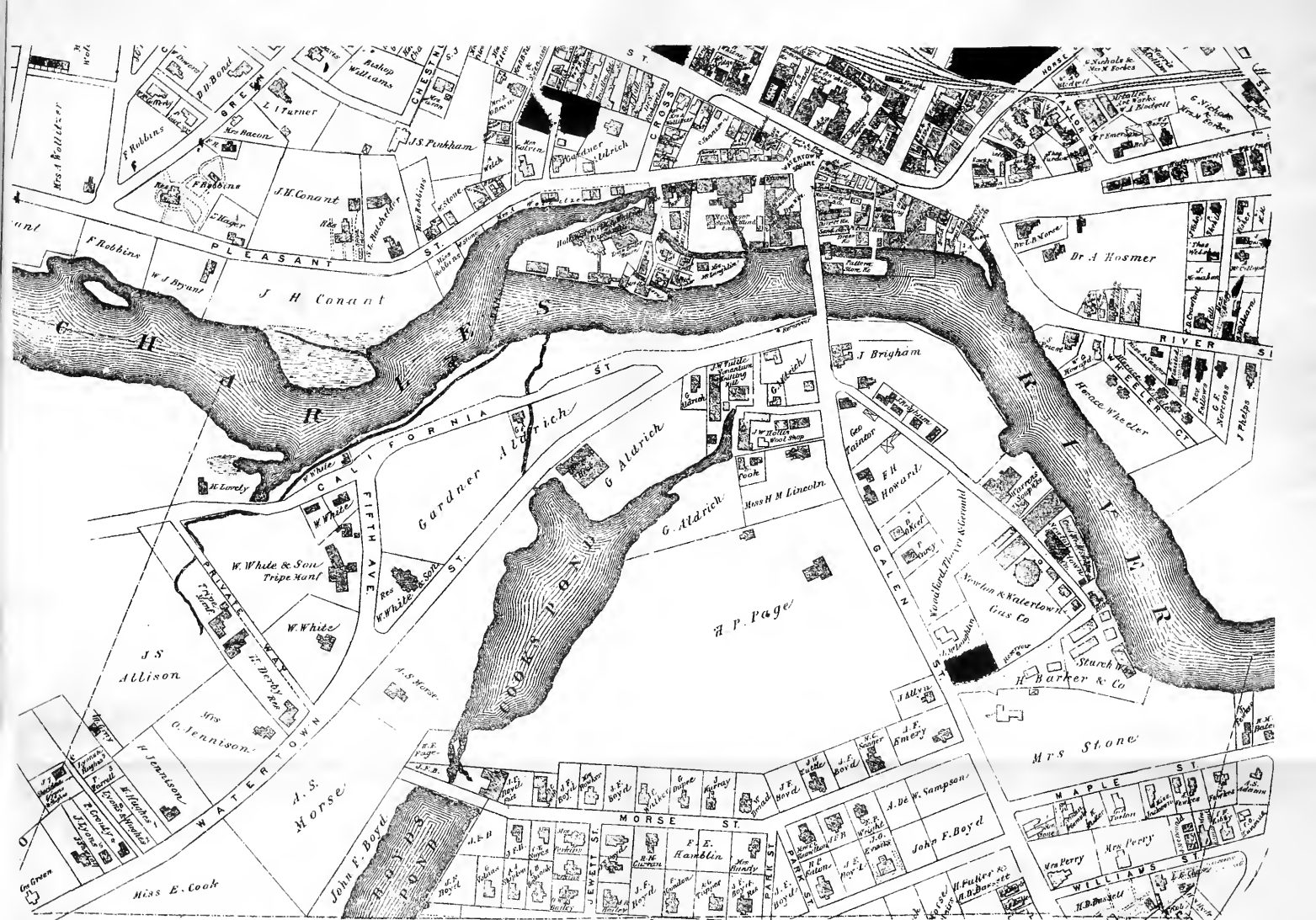
The significance of the event to us is that it preserves the testimony of Winthrop as to the *age* of the dam above. The water-power was gained by the dam. It was a fall of only four and a half feet, as Mr. Magee, the present proprietor, informs me; and this involved a canal or raceway of more than an eighth of a mile in length along the gentle descent of the Charles.

Who built the dam? It was made of natural, rounded, massive field-boulders. English pioneers, sparing of time and men, in a region of virgin forests build dams of *wood* cut along the banks above and floated down, *not* of scattered boulders gathered over great areas from the surface. When was the dam built? History is silent. Dudley, who had a lawsuit about the ownership of the mill, is silent. Winthrop himself is silent. Could the thoughtful pen that recorded the discovery of Adam's chair, since lost, and again and recently found; recorded the fight between the mouse and the snake, witnessed with such natural interest by the Puritans who formed a ring around the combatants; as also this incident at the mill-flume,—could the same thoughtful pen have failed to mention so considerable an achievement in the interests of the infant colony as the construction of a stone dam across the Charles, had it











occurred contemporaneously with these other events? Impossible. What follows? This: *The dam was here when Winthrop came.*

But *before* Winthrop came, Roger Clapp had learned of the Indians fishing in the shallows at the head of tide-water, the fish being massed there, because they could get no farther on their way to spawning-ground. They were stopped by a *fall* in the course of the stream. When Winthrop first saw the fall it was a familiar fact. The dam was *already built*, and concealed under the *fall of fresh waters*. The fall was there before Clapp came.

The earliest map of the site of Watertown, to which I have referred, has on it the canal on which the flouring-mill was erected; and it is recorded that the colonists *found the natural canal, or raceway*, when they came. What again follows? This: *The dam was the work of a people who had come and gone before the earliest English settlement on our shores.*

Look at the testimony of the weir. The structure consists of a low stone-wall, spanning the river, and shaped like the letter V, with the angle down stream, and a trap at the point. The weir is submerged at flood-tide. With the flood come schools of fish seeking spawning-ground and fresh water. In the absence of a dam there would have been nothing to arrest their progress, and they would not have stopped at Watertown any more than at any other point below or above. With a dam the fish would mass below, and with the ebb-tide seek escape at the angle of the weir. The fact that they were taken in great numbers at the present Watertown by a weir is absolute proof of the existence of the dam. Wood says one hundred thousand were taken in two tides,—that is, in a single day. The Indians had taught the settlers that the fish could be used for manuring their corn, and the poor crop of 1631 had made them feel the necessity of a fertilizer.

In the spring of 1632, authorized by Winthrop, the *weir* was completed. The order presupposes the existence of the dam; without it the weir would have had nothing to catch.

As Winthrop was complained against by Dudley for thus personally authorizing (the General Court not being in session) the construction of the weir in the winter and spring of 1631-32, it is clear the dam must have been previously built.

The dam must have been built before 1631. It could not have been built by the handful of Saltonstall's half-invalid men between the autumn of 1631 and the spring of 1632. Why? They had quite enough to do to provide for the wants of their families. Moreover the dam was built of rounded bowlders gathered from the fields, not from quarries; and that involved too much time and labor. How do we know it was built of field-stone, — rounded bowlders? In this way. Not many years ago the foundations of portions of the dam were undermined, and the water broke through and left the structure bare to its base, open to any eye.

Let us look at the Records of the General Court.

Wood returned to England in August, 1633. He records, in his "New England's Prospect," that there was "a water milne on Stony Brook (Roxberry)" and another in Saugus. The mill at Watertown is understood to have preceded all others. If this be so, it must have been set up, at the latest, in 1633. It was a work of private enterprise, since later action of the General Court decided that it belonged to Mr. Dudley and not to Mr. Howe. At a town-meeting in Watertown, Jan. 3, 1634-5, it was "voted that four rods wide on each side of the river should be laid apart to the use of the ware, so that it may not be prejudicial to the mill." The necessity of defining the rights and wants of the weir and the mill had been revealed by experience in the years immediately preceding.

The Records of the General Court contain its action at the session, July 5, 1631, authorizing a levy on the public for the opening of the canal along Blackstone Street from the cove at the present Haymarket Square through to the water at the east, and another levy, at the session Feb. 3, 1631-2, for making the palisade about Newtown (now Cambridge). Now, is it not clear that a large work on Charles River, like the building







HELIOTYPE COPY OF WINTHROP'S ORIGINAL MAP OF 1634.  
FOUND BY MR. HENRY WATERS IN ENGLAND.





of a stone-dam, involving the labor for a long time of a large number of able-bodied men, could not have been undertaken without discussion? As a private matter, it could not have been done without capital and the co-operation of laborers; as a public matter, it could not have been undertaken without the authority of the General Court; but of this there is no record. Contemporary or subsequent history does not mention it.

Finally, it would have been much cheaper, and have required less time, to build a mill on Clematis Brook, with abundant fall, and only a dam of wood.

The meaning of all this is that the dam was where it now is before Winthrop came.<sup>1</sup>

Why do I speak so confidently? Fortunate leisure has enabled me to go far enough in certain directions of study and exploration to see what *must be* as a matter of scientific deduction. When that point, the *what must be*, is reached, prediction is natural, unavoidable, and safe. As I prophesied from the literature of geography the finding of Fort Norumbega at the junction of Stony Brook with the Charles, and went to the spot and found it; and as I deduced the site of the remains of Leif's houses in Vinland from the necessities which the strict construction of the Sagas required, and went to the spot where I had indicated that the remains had once been, and found them there more than a year after the prediction was announced, — so I have arrived by inevitable deduction at the seat and centre of the early colony of Northmen in America.

Let me be rightly understood. I do not deduce the *måser* industry from the presence of the dam at Watertown, but I deduce the *dam* and *seaport* and *docks* and *wharves* as *essential* to the *måser industry* revealed in the Sagas, and confirmed in the walled canals boom-dams and deltas throughout the region.

<sup>1</sup> When my communication was made to the American Geographical Society, I had forgotten that I possessed Winthrop's map of 1634, one of the great prizes brought to light by Mr. Henry Waters in his researches in England. This map contains the dam separating salt water from fresh water. It may be classed among the curiosities of the fulfilment of prediction. Had the dam been built in Winthrop's time it must have been with his knowledge, and he would have called it a *Dam*, not a *Rip*, — the name he has given.

I may not take your time to tell of my interviews with many of the best-informed and elderly men of Watertown,—with ladies who as little girls had gathered wild violets and anemones on what, with the exception of the trees, were the otherwise unoccupied islands below the dam, then as now walled about with substantial masonry without mortar; or of my delight in finding the walled channels between these islands,—at least four in number,—the *docks*; or the *black meadow muck* UNDER the gravelly earth that constitutes the body of the walled islands;<sup>1</sup> or the parallel cyclopean walls extending on both sides of the river along the narrows and shallows to which Clapp came in 1630 (these walls, extending to the opening meadows toward the Arsenal, by narrowing the channel increased the depth of the water at high tide, and so made it practicable to float the blocks across the river from the boom-dams on the right bank below to the docks and wharves, as well as with greater ease and certainty to lead ships to and from the docks); or the long basin for the reception of blocks and their accumulation, which also serves as a fish-way<sup>2</sup> into the basin from the north; or the great artificial basin (Cook's Pond), the product of the boom-dam, on the opposite side of the river,—*all which*, and much more that might be named, belong to the period of seven to nine centuries ago: *the work of the Northmen*.

These are *remains of the ancient city and seaport of Norumbega*. This was the site, pictured on so many ancient maps, at the head of tide-water, on the "*River that flowed through a Lake to the Sea*,"—the *Hóp of Thorfinn*, *saft at flood-tide and fresh at ebb*,—*the ancient Boston Back Bay*. The islands were *wharves*. The channels between them, closed or nearly closed at the upper end near the *basin*, were *docks*. On these wharves the mäsar blocks that

<sup>1</sup> This was *alluvial soil*, once the surface-soil, submerged at extreme high-tide below the falls, and deposited from the eddy of the flood-tide and current of the Charles before the dam was built. The proprietor of the foundry on the spot informed me that he had occasion to find substantial foundation to support parts of the foundry. He dug down through the gravel till he came to *black meadow muck*, and through that to solid bottom.

<sup>2</sup> There is a fine display, already referred to, of boom-dams and fish-ways on Vine Brook, between the Arlington Reservoir and the Mystic, and another on Mother Brook, leading from the Charles to a tributary to the Neponset. See town maps.



Pavement of Boulders, Stony Brook Fisheries, originally covering about four acres.







Blocks of pavement gathered in heaps from the bed of muck along Stony Brook. Glimpses of stream against shore in foreground.



Removing muck (black vegetable mould) from under the pavement, to provide clean floor for the Reservoir.

had floated down the Charles had been arrested by the dam and turned into the basin, — the northern canal, — whence they were taken out and piled to dry and await their turn to be shipped.

Here, besides the conveniences for piling under cover the māser blocks, there were storehouses for dried salmon, for the peltry purchased in its season, and not impossibly for the Indian corn grown on the plains of Newton, Danvers, Millis, and Holliston.

On the shores above and below were naturally shops for barter, and dwellings for all classes, and necessarily, with the culture of the Northmen, provision for amusement, for public worship, and for the wants of government, — the Althing, to which these early (perhaps earliest) self-governing people were accustomed.

How did the country about look? Sketches of its appearance have been preserved.

Dunton was one of a party on horseback who rode through Cambridge and Watertown to attend the annual sermon preached to the Indians at Natick. It was in the latter part of the seventeenth century. They had stopped for refreshment at the Watertown of Saltonstall, near the little churchyard half a mile to the west of Mount Auburn Station. He says: "The Inhabitants live scatteringly; within half a mile is a great Pond [Fresh Pond], divided between the towns. A mile and a half from the town is a great Fall of Fresh Waters [at the present Watertown], which convey themselves into the Ocean through Charles River. Having well refresh't ourselves at Watertown we mounted again, and from there we rambled through several Tall woods between the mountains, over many rich and pregnant valleys as ever eye beheld, beset on each side with variety of good Trees. So that had the most skilful Gardner designed a shady walk in a fine Valley, it would have fallen short of that which Nature had done without him."

Did Dunton ride in view of the still living forest giants, — the Waverley Oaks?<sup>1</sup> They were then two centuries younger. Can they be

<sup>1</sup> See Stillman's Picturesque Cambridge.

among the patriarchal illustrations of the inherited taste in landscape gardening such as Dunton intimates he had not seen surpassed in the Parks of England?

Verrazano, a hundred and fifty years before, described lands as pleasant as it is possible to declare, and grand forests that an army, were it never so great, might have hid itself therein. Cambridge territory was a cultivated country to Champlain, and when Winthrop came. Look at the Terraces along the Charles below Watertown, and near Waltham, and the site of a vineyard on the hill west of Waltham; at the terraced amphitheatre near Bird's Pond, a few rods from the Mount Auburn Station on the Fitchburg railroad; and at the theatre below the Arsenal, across the road, and near the first corner on the left. How all these speak of the culture and the work of an ancient people!

What region is Dunton describing? Can it have been anything other than that of the cultivated lands of the ancient Northmen, who lived at or near the city of Norumbega?

Here was the ancient seaport of Vinland, for the colony that came after Thorfinn left, to which in 1121 Bishop Upsi came to hold up the symbols of the Faith. The basin, wharves, docks, canals of this ancient seaport underlie the city of Watertown to-day, and are connected with and serve its most prominent industries. Here came and went the commerce of the Northmen first; later, the commerce of the Frenchmen, and possibly of still other peoples. Here, at the modern Watertown, was the ancient CITY OF NORUMBEGA.

I have not hesitated to state this as the result of research that may not be questioned,—a research that included the Landfall of Leif Erikson on Cape Cod, and the colonization of Massachusetts by Northmen nine hundred years ago. Any other view is instantly confronted with the inquiry of when and by whom, if not by Northmen, was the stone dam built across the Charles at Watertown?

To assert this conviction on which I stand because I cannot help it,



I set up the Tower in Weston, at the mouth of Stony Brook, where I first found evidences of the work of the Northmen.

Over the tablet set in the wall of the Tower, the genius of the architect, Mr. Tryon, has poised the Scandinavian falcon (the symbol of sovereignty in Iceland) about to alight with a new world in his talons.<sup>1</sup>

The inscription upon the tablet is designed to cover the principal additions to the history of the foundation of Massachusetts.

Among the considerations that led to the erection of the Tower, besides those already mentioned, were these:—

1. It will commemorate THE DISCOVERY OF VINLAND AND NORUMBEGA in the forty-third degree, and the identification of Norumbega with Norway, the home country to which this region was once subject by right of discovery and colonization.

2. It will invite criticism, and so sift out any errors of interpretation into which, sharing the usual fortune of the pioneer, I may have been led.

3. It will encourage archæological investigation in a fascinating and almost untrodden field, and be certain to contribute in the results of research and exploration, both in the study and the field, to the historical treasure of the Commonwealth.

4. It will help, by reason of its mere presence, and by virtue of the veneration with which the Tower will in time to come be regarded, to bring acquiescence in the fruit of investigation, and so allay the blind scepticism, amounting practically to inverted ambition, that would deprive Massachusetts of the glory of holding the Landfall of Leif Erikson, and at the same time the seat of the earliest colony of Europeans in America.

<sup>1</sup> In Vigfusson's notes to Hornklofi's "Raven Song" (Edda), the raven is spoken of as "sworn brother to the eagle." Also as "gory beaked" and as having "flesh cleaving to his talons." Prussia has an Order of the Black Eagle. In the Museum at Reykavik a falcon is mounted above the President's chair. The eagle in earlier times was uniformly, though not invariably, the *symbol of Sovereignty among the powers of Europe*.

Do you ask, How long were the Northmen here?

Dr. Henderson found, in his Icelandic Researches, 1813-14, that the Northmen — so called by Alfred — were in Vinland two hundred and twenty-seven years. This estimate is apparently based on the following two dates: (1) The date of the appointment of Bishop Gnipson (Erik Upsi) to Greenland and Vinland, which may well have been 1120, as he came in 1121; (2) The date from the Port Records of the arrival in Iceland of the latest merchant vessel from Markland in 1347. This would make the interval precisely two hundred and twenty-seven years. But Norsemen were here earlier. Gudrid's namesake — the pale-faced, yellow-haired, large-eyed visitor, in dark woven-cloth petticoat, who spoke Icelandic, and visited Thorfinn's wife at the site of Gerry's Landing — was here in 1009. The vigorous prosecution of the industry of *māsur wood* doubtless followed very soon after the purchase of the house-scales from Thorfinn by the Bremen merchant. This was in about 1013.

Maginn in 1597, Ramusio in 1565, Thevet in 1556, Allefonsce in 1543, and Verrazano in 1524 record the presence of a fine people, amiable, courteous, ceremonious.

The Breton French were here as early as 1465 (Letter of Queen Regent Catherine de Medici to Forquevantes at the Court of Spain, Gaffarel's "Thevet," p. 399), some thirty years before the Landfall of John Cabot in 1497. They, the Bretons, possibly did not claim and occupy the territory till some time after the Northmen had left.

This would leave it probable that the interval between the advent of the Bretons and the departure of the Northmen in the *māser* trade was one hundred years or more.

It is certain from the foregoing that Northmen, to say nothing of the mixed race, were here — somewhere between latitude 40° and 46° — from 999 to 1347, — that is, from the Landfall of Leif to the departure of the last timber-ship from Nova Scotia or Cape Breton. The Northmen were certainly on the Island of Cape Breton, as Norse names show.



Amplitheatre near Bird's Pond, Mt. Auburn Station, on the Watertown Branch, Belmont.



The Breton French were here from about 1465 to 1630. The English have been here from 1620 to 1889. Relatively, the times are —

The Norsemen for about	. . . .	350 years.
The Bretons	“ . . . .	170 “
The English	“ . . . .	270 “

If time would permit, I might tell you further of the Mäser industry; of the fisheries and furs and agriculture; of the amusements, and the republican form of government inherited with the Norse blood; of the social relations of the Indians with the Northmen, and the splendid men found by Thevet and Verrazano, and later by the Pilgrims and Puritans, in such samples of chieftains as Massasoit, Miantonimo, and King Philip.<sup>1</sup> I might point out the course of the Northmen, after the mäser blocks of the valley of the Charles had been exhausted, and their settlements elsewhere; the traces of their stay on the Penobscot, and their progress through the State of Maine and Nova Scotia to Cape Breton; the possible causes of the decline of Greenland; the final departure of the last ship in the mäser trade from Markland (Cape Breton), and its arrival in 1347 in Iceland. I might hint at the lines of research specially connected with traces of the language of the Northmen and their literature, such as the fact recorded by Roger Williams that the title “sachem” or “sagamore” of the Indians has the same root, *sak*, as the Icelandic word for “king;” and their knowing Charles’s Wain as the constellation of the Great Bear, and the evidences of the presence of Northmen on the shores of Narragansett Bay. Much of this, however, I must leave to others, who haply will enter, with new enthusiasm and more time before them, into this fresh field in archæological and geographical research.

It has been suggested that the trustworthiness of my conclusions might be tested by the spade, — that bronze and pottery should be sought for.

Articles of such materials were not improbably to some extent in use

<sup>1</sup> See Bodge’s portrait of Canonchet, New England Historical and Genealogical Register, p. 143, April, 1890.

in Vinland and Norumbega. Remnants of much corroded bronze have been found by Nordenskjöld in Greenland, from which place the early Northmen came. Porous pottery would, perhaps, be less likely to survive in such a climate;<sup>1</sup> it has, however, been found in ancient Norway. But of implements which we know from the Sagas were in use here by the Northmen we have found specimens. Thorwald's men subsisted through their first winter on the salmon of the Charles. Here is a stone sinker found near the site of Thorwald's dwelling-house. I have seen and photographed several others found along the banks of the Charles. Similar to these were the salmon sinkers used by the Indians. The equivalent of pottery found in Greenland,—wrought soapstone,—I have found at various points throughout the valley of the Charles.<sup>2</sup>

Here is an Indian arrow-point picked up on the field of the battle between Thorfinn and the Skraelings, in which a man of distinction, Snorri Thorbrandson, fell. His body was found, so the Sagas say, with a *sharp stone* sticking in his head. If the "sharp stone" may not have been a flint arrow-point, but a stone tomahawk, here is a sharp stone that may bear that name, which was found on the same battle-field.

A great stone mortar, such as Northmen used in very early times to grind their grain in Norway, Scotland, and Ireland, was found, as already mentioned, near the site of the Tower, and is now set in the wall near its base.

Copper and brass, in the form of implements of war or articles of decoration, have been found in graves within the territory of Norumbega. In the grave of Uncas, in Norwich, Conn., a very ancient mäsér-bowl, long used, was found, and is now preserved in the Slater Museum; another was found in the grave of Miantonimo. I have photographs of them.

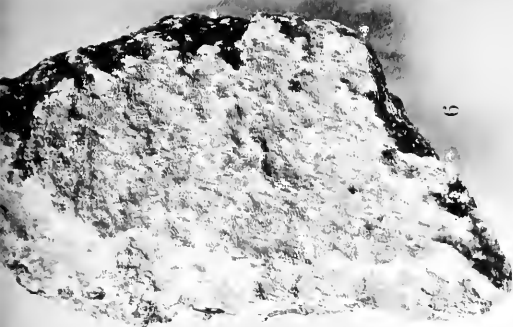
The mäsér-bowl found with King Philip at the time of his capture is still preserved among the collections of the Massachusetts Historical Society.

<sup>1</sup> Glazed pottery, Du Chaillu says, was unknown in the north. Montelius says the same.

<sup>2</sup> Professor Putnam has described a quarry of soapstone and manufacture of soapstone vessels found in Rhode Island. I have fragments of soapstone vessels found on Long Island, New York.



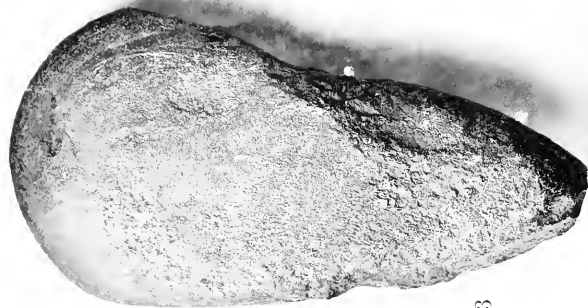
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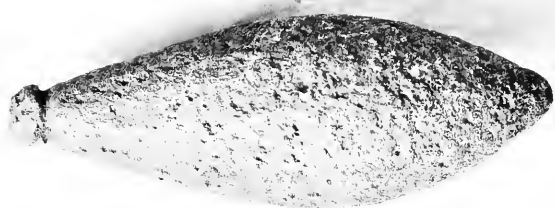
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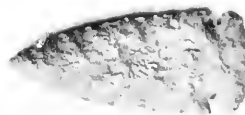
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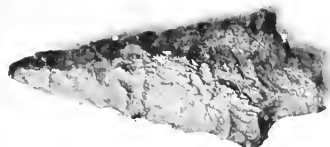
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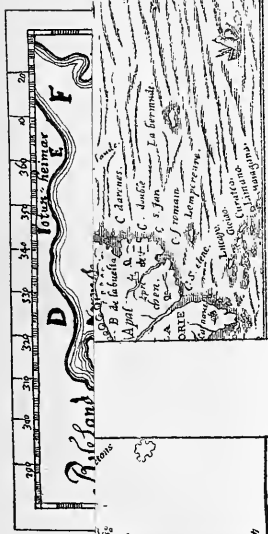
1. Sinker. 2. Arrow-head. 3. Stone Tomahawk.  
From near Gerry's Landing.

4. 5. 6. Fragments of Soap-stone Vessels.

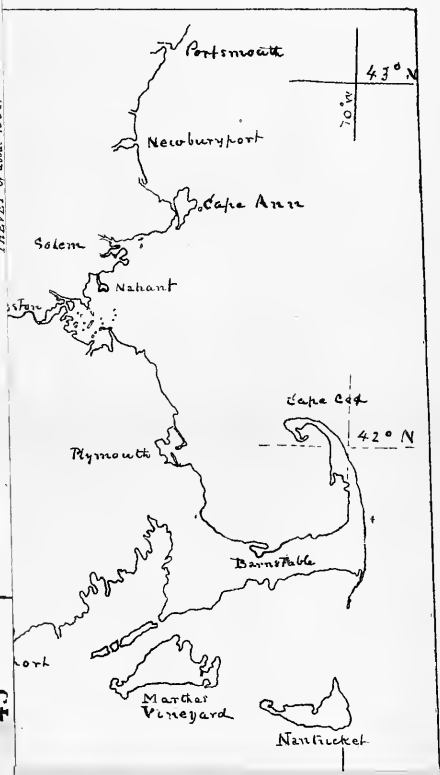
7. Arrow-head.  
From Garnet.

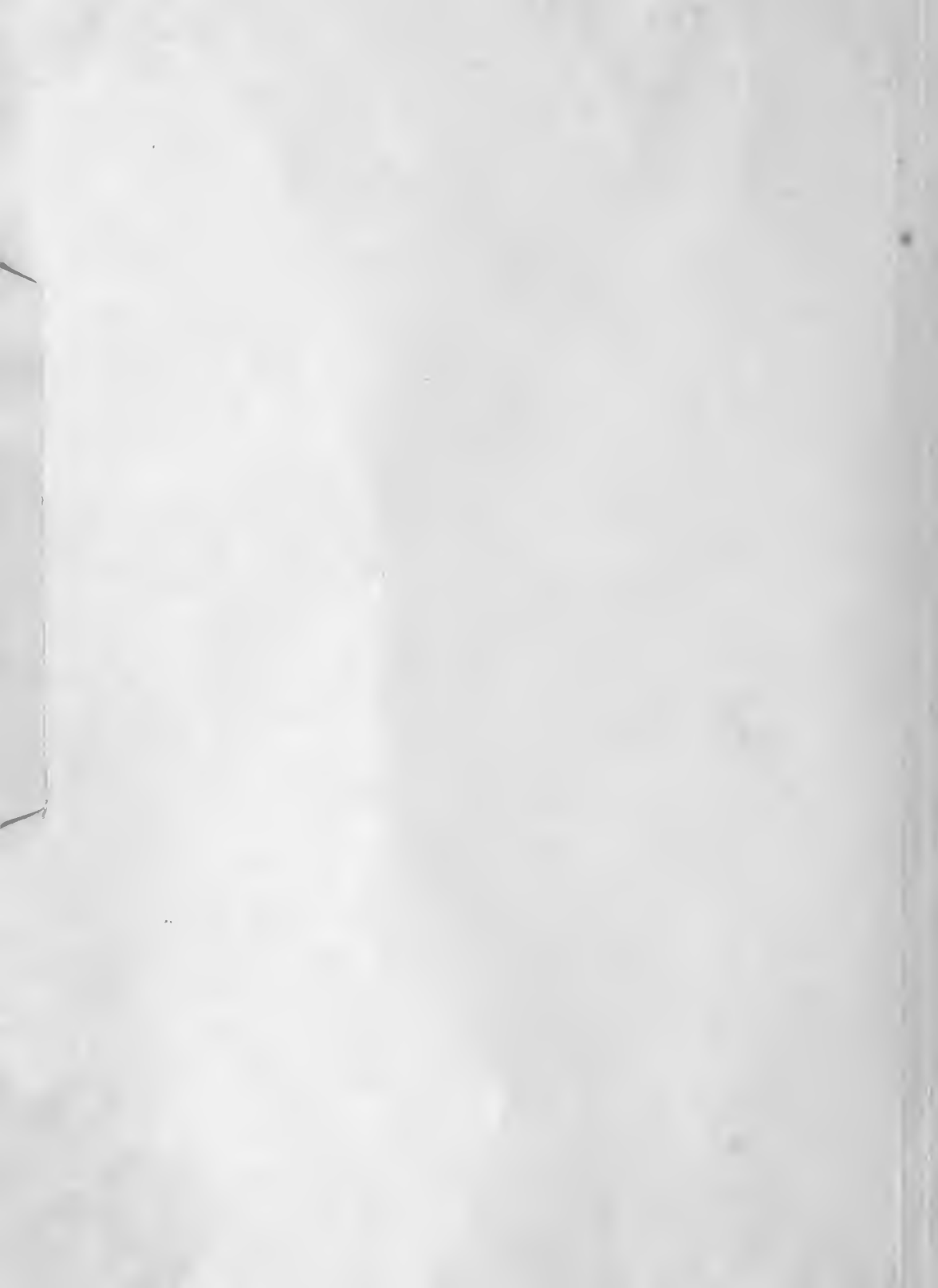




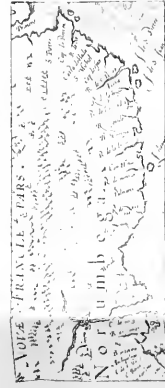
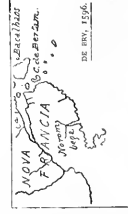
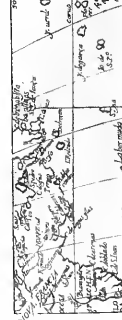
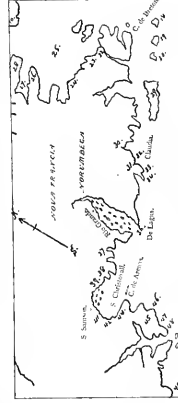
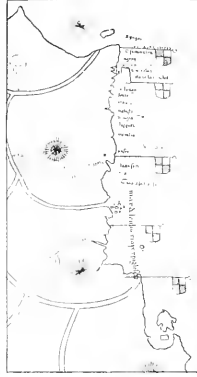
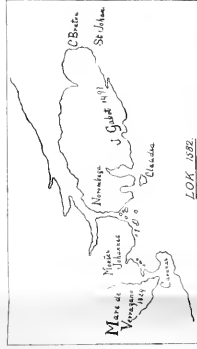


THEYET of about 1856.





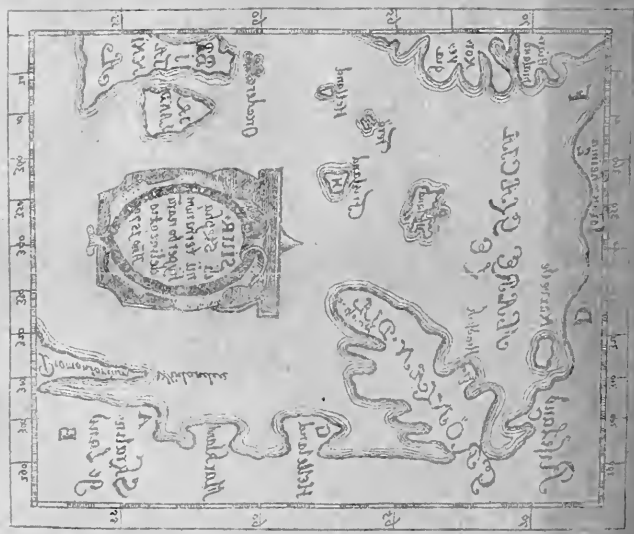
between Cape Ann and Cape Cod



ბოძებუი ბოი ინი ანოი ნოვად



სტეფანოვი 1210



ეუი რიდი ბოილივი ანი რიდი



სტეფანოვი 1210

I have seen stone tablets, bearing inscriptions apparently of great historic interest, some of which may have been wrought by men of Norse descent. Mr. Ober, of Beverly, has had them photographed.

Such articles, as well as bronze and pottery, possibly await the student.

My own search, however, has been less detailed. I have looked for the evidences and seats of certain industries pursued through long periods of time and on a large scale by Northmen; I have looked for the site and memorials of an historic city, built, long occupied as a seaport, and abandoned many centuries ago; I have sought the birthplace of the earliest European colony on our shores, and something of its course as a people; and I have to-day sketched the results of my labors.



## NORUMBEGA.

By JOHN G. WHITTIER.

---

THE winding way the serpent takes  
The mystic water took,  
From where, to count its beaded lakes,  
The forest sped its brook.

A narrow space 'twixt shore and shore,  
For sun or stars to fall,  
While evermore, behind, before,  
Closed in the forest wall.

The dim wood hiding underneath  
Wan flowers without a name;  
Life tangled with decay and death,  
League after league the same.

Unbroken over swamp and hill  
The rounding shadow lay,  
Save where the river cut at will  
A pathway to the day.

Beside that track of air and light,  
Weak as a child unweaned,  
At shut of day a Christian knight  
Upon his henchman leaned.

The embers of the sunset's fires  
Along the clouds burned down;  
"I see," he said, "the domes and spires  
Of Norumbega town."

"Alack! the domes, O master mine,  
 Are golden clouds on high;  
 Yon spire is but the branchless pine  
 That cuts the evening sky."

"Oh, hush and hark! What sounds are these  
 But chants and holy hymns?"  
 "Thou hear'st the breeze that stirs the trees  
 Through all their leafy limbs."

"Is it a chapel bell that fills  
 The air with its low tone?"  
 "Thou hear'st the tinkle of the rills,  
 The insect's vesper drone."

"The Christ be praised!—He sets for me  
 A blessed cross in sight!"  
 "Now, nay, 't is but yon blasted tree  
 With two gaunt arms outright!"

"Be it wind so sad or tree so stark,  
 It mattereth not, my knave;  
 Methinks to funeral hymns I hark,  
 The cross is for my grave!"

"My life is sped; I shall not see  
 My home-set sails again;  
 The sweetest eyes of Normandie  
 Shall watch for me in vain."

"Yet onward still to ear and eye  
 The baffling marvel calls;  
 I fain would look before I die  
 On Norumbega's walls."

"So, haply, it shall be thy part  
 At Christian feet to lay  
 The mystery of the desert's heart  
 My dead hand plucked away."



“Leave me an hour of rest; go thou  
 And look from yonder heights;  
 Perchance the valley even now  
 Is starred with city lights.”

The henchman climbed the nearest hill,  
 He saw nor tower nor town,  
 But, through the drear woods, lone and still,  
 The river rolling down.

He heard the stealthy feet of things  
 Whose shapes he could not see,  
 A flutter as of evil wings,  
 The fall of a dead tree.

The pines stood black against the moon,  
 A sword of fire beyond;  
 He heard the wolf howl, and the loon  
 Laugh from his reedy pond.

He turned him back: “O master dear,  
 We are but men misled;  
 And thou hast sought a city here  
 To find a grave instead.”

“As God shall will! What matters where  
 A true man’s cross may stand,  
 So Heaven be o’er it here as there  
 In pleasant Norman land?”

“These woods, perchance, no secret hide  
 Of lordly tower and hall;  
 Yon river in its wanderings wide  
 Has washed no city wall.

“Yet mirrored in the sullen stream  
 The holy stars are given;  
 Is Norumbega, then, a dream  
 Whose waking is in Heaven?”

" No builded wonder of these lands  
 My weary eyes shall see ;  
 A city never made with hands  
 Alone awaiteth me —

" *Urbs Syon mystica* ; I see  
 Its mansions passing fair,  
*Condita cælo* ; let me be,  
 Dear Lord, a dweller there ! "

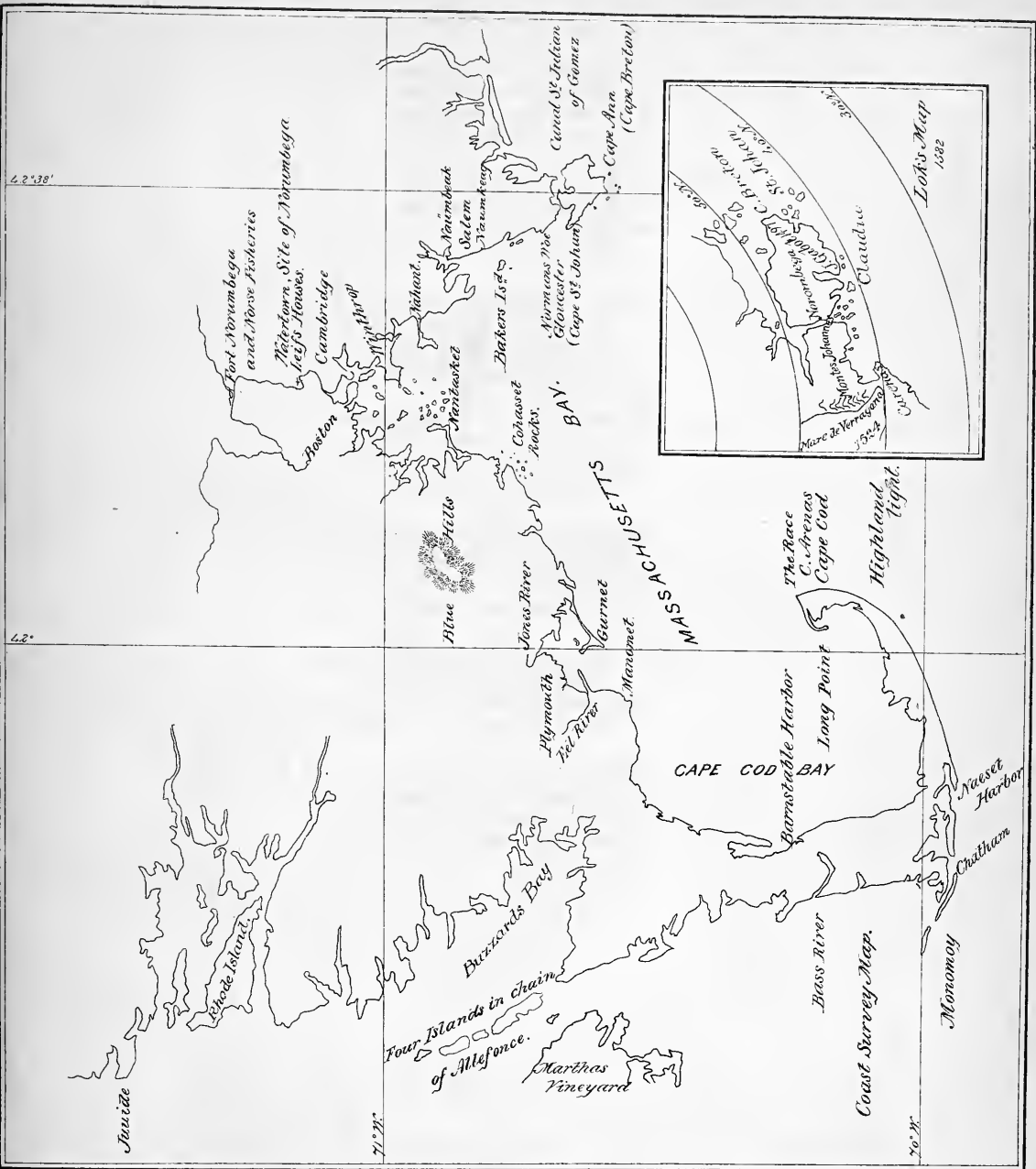
Above the dying exile hung  
 The vision of the bard,  
 As faltered on his failing tongue  
 The song of good Bernard.

The henchman dug at dawn a grave  
 Beneath the hemlocks brown,  
 And to the desert's keeping gave  
 The lord of fief and town.

Years after, when the Sieur Champlain  
 Sailed up the unknown stream,  
 And Norumbega proved again  
 A shadow and a dream,

He found the Norman's nameless grave  
 Within the hemlock's shade,  
 And, stretching wide its arms to save,  
 The sign that God had made, —

The cross-boughed tree that marked the spot  
 And made it holy ground :  
 He needs the earthly city not  
 Who hath the heavenly found.

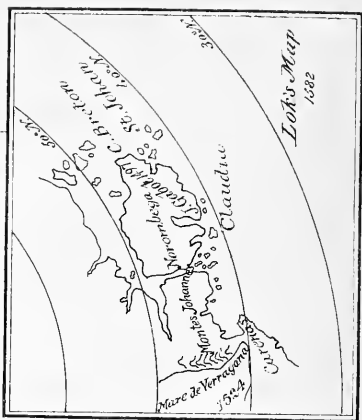


42° 30'

42°

71° 30'

70° 30'



Lok's Map  
1632



# VINLAND.

By E. H. CLEMENT.

## MIST AND FLOTSAM.

A. D. 1000.

EARTH endures;  
Stars abide —  
Shine down in the old sea:  
Old are the shores;  
But where are old men?  
I who have seen much  
Such have I never seen.

. . . . .

Here is the land  
Shaggy with wood  
With its old valley,  
Mound, and flood,  
But the heritors?  
Fled like the flood's foam,  
The lawyer and the laws  
And the kingdom  
Clean swept herefrom.

EMERSON, *Earth-Song*.

For Fancy's gift  
Can mountains lift:  
The Muse can knit  
What is past, what is done  
With the web that's just begun.

EMERSON, *The Poet*.

SOUNDETH the prophetic wind,  
The shadows shake on the rock behind,  
And the countless leaves of the pine are  
strings  
Tuned to the lay the wood-god sings.

Hearken! hearken!  
If thou wouldst know the mystic song  
Chanted when the sphere was young.  
Aloft, abroad, the psalm swells;  
O wise man, hear'st thou half it tells?  
O wise man, hear'st thou the least part?

'T is the chronicle of art.

To the open ear it sings  
Sweet the genesis of things.

EMERSON, *Woodnotes*.

My spirit bows in gratitude  
Before the Giver of all good,  
Who fashioned so the human mind  
That, from the waste of Time behind,  
A simple stone, or mound of earth,  
Can summon the departed forth;  
Quicken the Past to life again,  
The Present lose in what hath been,  
And in their primal freshness show  
The buried forms of long ago.  
As if a portion of that Thought  
By which the Eternal Will is wrought,  
Whose impulse fills anew with breath  
The frozen solitude of Death,  
To mortal minds were sometimes lent,  
To mortal musings sometimes sent,  
To whisper—even when it seems  
But Memory's fantasy of dreams—  
Through the mind's waste of woe and sin,  
Of an immortal origin!

WHITTIER, *The Norsemen*.

## MARE OCEANUM.

WHEN Earth's form and void begun  
Underneath the ancient Sun,  
Poured round all the flowing Ocean  
First obeying Law in motion.  
First of things terrestrial  
Acknowledging celestial;  
Free still of all governance  
Save eternal ordinance.  
Universal potency  
Lurks in all-embracing sea,  
All-watering stream, all-nourishing,  
From seeding unto flourishing;  
Pervading earth in myriad form,  
Now glacier, now summer storm, —  
Visiting thus but to return  
Every drop to Ocean's urn;  
All-bearing on its broad highway  
From yonder cape to far Cathay;  
Ever the same to all men free,  
Whoe'er on land may master be, —  
One law deduces history thence:  
Things continue as commence.  
When the first savage launched his tree,  
Bestriding it in southern sea,  
Then hollowed it, then shaped an oar,  
He linked the whole world shore to shore.  
So bid we vikings' history

Surrender us our mystery.  
 Roman legions' solid walls  
 Tell Britons still when they were thralls;  
 But our unfathomable wave  
 Was ne'er to old Rome's arms made slave:  
 Yet Christian Rome's new influence  
 Is wider traced by finer sense;  
 Surpassing war, a mission's zeal  
 Red Eric tamed and laid Leif's keel,  
 So the Sea's worshipper devout  
 Will ever draw new wealth thereout.  
 Or noon or night, or fair or foul,  
 Patient as fasting monk in cowl,  
 He cons Earth's opening page here spread, —  
 A blank still, or, if writ, unread  
 Save by the subtle divination  
 Of Science's imagination.

#### ODYSSEYS.

MAN here faced eternity, —  
 Poring on the mystery,  
 Ever venturing in its brink,  
 Better learning not to sink,  
 Still its wide, gray pastures grazing,  
 Still beyond and farther gazing.  
 The eldest heroes of the world  
 Plied the oar and sails unfurled,  
 The eldest poet sang the Sea:  
 Make us another Odyssey!  
 Tell us more, and always more;  
 How they added shore to shore,  
 Out from Posts of Hercules



Toward the far Hesperides ;  
 How Atlantis e'en they scanned,  
 Or believed they traced its strand,  
 Looming in enchanted mist ;  
 How, of sudden, sails were kissed  
 By scented breeze from Happy Isles  
 Whose fable seamen still beguiles.  
 What an epos, from Phœnicians  
 Down to merchanting Venetians !  
 Argive galleys, prows of Rome,  
 Beaching e'en on our old home.  
 Tell how Rome's puissant rule  
 Reaches to the farthest Thule,  
 And from Iona's cloistered halls  
 Christ's spell northmost lands enthralls,  
 And Iceland, warming in its gleam,  
 Blossoms in church and academe ;  
 Until, surpassing all the earth  
 In learning and in moral worth,  
 Forth sends, in first millennial year,  
 Princes and bishops even here !

#### WUNDERSTRAND.

TELL not us that all is writ  
 Of Ocean's lore, — not us who sit  
 From birth in sight of Ocean's wonder,  
 And dream what therein is or under.  
 Many a record writ in water,  
 Making history-books the shorter,  
 Reappears to him who heeds  
 The truth that every law must needs  
 Bear but one fruitage, near or far,

This age or that, on any star.  
 So clear-eyed Science, sage, sedate,  
 Bidden by Fancy all elate,  
 Constructs the ships the dreamer dreams,  
 Figuring the very ribs and seams,  
 And, led by poet's ecstasies,  
 More and more of truth still sees.  
 Shore-dwellers never quit their stand  
 Of watch upon the wonderstrand,  
 Noting the moods of the changing sea  
 For what new teaching thence may be.  
 E'en seaweed thrilling message bore,  
 "In the sun and the wind and the wild uproar,"  
 To him who sang how Boston Bay  
 Takes Boston in her arms each day.  
 The child the salt waves reared beside,  
 Whose playfellow is the rising tide,  
 And tiny, monster-peopled pool,  
 Among the rocks, his earliest school,—  
 No chapter of a sea romaunt  
 His fervent faith may ever daunt.  
 The time-worn wreck's ribs in the sand  
 For chapel of devotions stand.  
 He knows the wild-flowers of the deep,  
 The harvests strange that fishers reap,  
 Eels Portuguese, and squids, and whales.  
 He lists old seamen tell their tales;  
 He sees one morn from shining sea  
 A fin revolved all silently,  
 Marking Behemoth's bulk beneath,  
 Or sea-dog's eye in green wave's wreath.  
 He sees the ebb bare Ocean's bed,  
 And flood the broad seas inland spread;  
 Shudders at storm-rote in the night,  
 And finds the broken ship at light.

He knows how homing sail round up  
 From underworld, — first the maintop,  
 And then the mizzen, and then the hull,  
 As up the long swell rides the gull.  
 He once beholds in a mirage  
 Brigs bottom up and strangely large  
 Stand in the sky athwart Broad Sound, —  
 A sworn sea-serpent's sauntering ground, —  
 And harks the nixey's ring the bell  
 Whose dolors mark the east wind's swell.  
 His childhood's awe is ne'er forgot  
 Of maelstrom in steep Shirley Gut,  
 Nor seasoned yet the child's surprise  
 Who saw before his infant eyes  
 Side-wheeled Cunarder overwhelm  
 With British smoke the wine-glass elm  
 Of Apple Island. Small things? True:  
 Small thing for wonder is it, too,  
 That ships that fared to Greenland's shore  
 Should southward fare a little more:  
 Gloucester now fishes Iceland seas,  
 Iceland then came to Penikese.  
 Light then as now did shallop run  
 O'er morning sea in jocund sun,  
 Hands stout as now when night winds rave  
 The rudder grasped and cut the wave,  
 Sweet then as now the smooth bay's reach,  
 And soft to keel the sandy beach.  
 A marvel greater far it were  
 If ne'er a bold adventurer,  
 To make the farthest voyage his boast,  
 Had wandered on from coast to coast.  
 Would such his lengthening leagues have reckoned  
 So long as Blue Hill onward beckoned?

## VINLAND RUNE.

SING we, then, a rugged rune,  
 In Emerson's and Whittier's tune,—  
 Verse for honest-spoken folk,  
 Compact of stuff as egg of yolk,  
 Simple, blunt, but yet not coarse;  
 Native, and still something Norse,  
 As is meet for kindred race  
 Dwelling in the very place  
 Where the Norsemen moored their ships  
 And left their names on savage lips.  
 Italian Colon Iceland sought,  
 And tales the bardic sagas taught  
 Of ancient trips to Western seas  
 Were treasured by the Genoese.  
 Americus's traitorous tale  
 Too long is suffered to prevail:  
 Christopher was not alone  
 Victim for a time outshone,  
 Where that crafty story spread.  
 Other voyages now are read,  
 Other learning now avails,  
 With North and South in balanced scales.  
 Not for all wear are silk and satin;  
 Not all was writ in Greek and Latin;  
 Tongues in rich diversity  
 Make modern university  
 Open arms to newest lore,  
 Thin conceits of old give o'er,  
 Barbarous birth our language owns,  
 Gothic pith is in our bones;  
 Heart of heart in kinship warms,

With levelling Vandals' peopling swarms,  
 Sturdiest stocks of old Caucasian, —  
 Liberty, self-rule, their passion,  
 Ever the same from earliest hour  
 To Alfred, King, and our own Mayflower.  
 From folk-mote to the Commonwealth  
 Is one straight march, naught won by stealth,  
 But bold in name of law and right,  
 Of people's need and people's might.  
 Kingcraft nor priestcraft frames decree  
 For them who dare the unpassed Sea.

## IDYLS.

A WONDROUS task waits him who sings  
 The idyls of our uncrowned kings.  
 But who begins must sail with Leif,  
 Red Eric's son, and that oft wife,  
 Fair Gudrid, and wise Karlsefne,  
 And all the sagas' company, —  
 Peering, like pilot, through their lore,  
 The mist and flotsam of our shore,  
 Wafted from that hurricane  
 Of Danish vikings from the main  
 That brought Canute to Britain's coast, —  
 Spawn of her ocean-ruling host, —  
 And reached our capes with circlings spent  
 Ere Harold's dynasty was rent.  
 'Mid these dark waves of history  
 Comes drift galore with poesy.

GUDRID, the wife of three, the sage and sweet,  
 Gudrid, the mother of that Vinland babe

Whose coming made the first home on our shores,  
 Mother of Greenland bishops, and herself  
 In saintly age welcomed as nun at Rome, —  
 Of all sweet women of the idyl's world  
 None than our Gudrid is more debonair.  
 What time brave Leif the title "Lucky" won,  
 Because it was his lot to save a score  
 Of shipwrecked voyagers huddled on a rock  
 In midmost ocean, Gudrid then appears.  
 First Thorer's bride, still but a fair-haired girl,  
 True floweret of the sea, lissome and strong,  
 Sharing her viking's joys and strifes and toils.  
 Leif's foster-sister thence, and cherished well:  
 Her husband dead, when suitors came to woo  
 Leif's word decided for her, and by him  
 Was given her hand to Thorstein Ericsson.  
 Penelope was not more chaste and wise:  
 When Thorstein Black folds her within his arms,  
 Beside her second husband's dying bed,  
 She gently puts him by, returns to Leif,  
 And understanding well (so sing the bards),  
 How to conduct herself, with due delay  
 Weds opulent Karlsefne, merchant bold,  
 And with him fares to Vinland. Here one day,  
 As Gudrid sat beside her cradled babe,  
 (The baby Snorre, named Karlsefnesson,  
 Grandsire of Ingveld, mother of Bishop Brand,)

A shadow filled the doorway, and there stood  
 An Indian woman, but pale and wild of eye,  
 (Such eyes, the saga saith, that none so large  
 Were ever seen in human face before,)

With yellow hair, like to the Northmen's locks,  
 A kirtle black and snood, and yearning said,  
 "What art thou called?" "Gudrid," the wife replied,  
 And bade her welcome. "And what art thou called?"

"Gudrid," the savage answered, but just then  
 Great din of battle rose without the door,  
 A Skraelling fell slain by Karlsefne's band,  
 And fled the great-eyed squaw with yellow hair.  
 So evermore this apparition haunts  
 The Iceland sagas; and when tales went round  
 Of Greenland ships that never had returned,  
 The fair-haired Skraelling stirred some dread surmise  
 Of Northmen living lost on that far coast,  
 With Skraelling daughters called by old home names,  
 And blond, with yellow hair and wide blue eyes.

So Gudrid passes, graceful, gracious form,  
 Amid salt bands of bearded mariners,  
 Bearing to Rome their grail of massur wood,  
 The veinings carven in a woven rede,  
 With Iceland's falcon as a dove of peace.

SEE, for her foil, Freydis, the sister strange  
 Of gentle Leif, manlike as Macbeth's wife,  
 Daughter of Eric, the red-handed Thane,  
 Heading the voyage of Helge and Finborg,  
 Plotting against them with outnumbering band,  
 And when her stronger will and craft had won  
 Advantage over them and discord reigned,  
 Slew them at night, and since no man of hers  
 Would slay their women, "Give me the axe!" she cried,  
 Nor stayed her arm till all lay in their blood;  
 Then stormed upbraiding to her husband's bed.  
 But bribed her band to secrecy at home  
 Of all the sorry work on Vinland shore.

THORHALL, the Hunter, what a figure he  
 For tale of heroes! Burly, taciturn,  
 Sarcastic, sceptic 'gainst the new-won faith,

Thor vaunting over Christ, and breaking off  
 From his companions to scour strange wilds alone.  
 The Melancholy Jacques's prototype!  
 Him the fleet-footed Scot slaves sent to save  
 Found lying on a hill-top muttering verse,  
 Breathing the whiles in frenzy strange and loud,  
 Possessed by spirit of the Norseland seer.

AND what a Lancelot these sagas sing!  
 Biorn Asbrandson, wooer of Thurid, the wife  
 Of Thorodd, whom the Orkneys' Earl, Sigurd,  
 Owed for the rescue of his tithing-men.  
 An idyl all his own this Biorn claims!  
 None but great Meister of the Nibelung's Lied  
 Its towering passions could in art unfold,—  
 Drama of wonders, valkyrs, chivalry,  
 Of combats, banishment, and dauntless plans  
 Of guilty heroism. Tannhäuser-like,  
 The erring knight to tears of shame is brought  
 By Thurid's brother, the priest of Helgafell,  
 And so flies in self-exile far to the south;  
 And after many years, when Iceland men,  
 Wrecked beyond Vinland, faced a warlike host,  
 As sachem (so too Northmen called their king)  
 Under its banner rode an aged knight,  
 Tall, straight, white-bearded, and in Northern speech  
 Addressed them, and so, learning whence they came,  
 Plied them with questioning of things at home,  
 Bade them make sail and flee while yet they might;  
 But ere they were gone whispered to Gudleif low,  
 "This sword to Kiarten, hero of Froda, take,  
 And to his mother Thurid give this ring!"  
 And so is left this knightly figure here,  
 Forerunner, haply, of great sagamores,  
 Friendly Canonicus and Massasoit!







MEMORIAL TOWER AT FORT NORUMBEGA.

SET UP 1889.

AT THE MOUTH OF STONY BROOK, ON THE CHARLES.

## ENVOY.

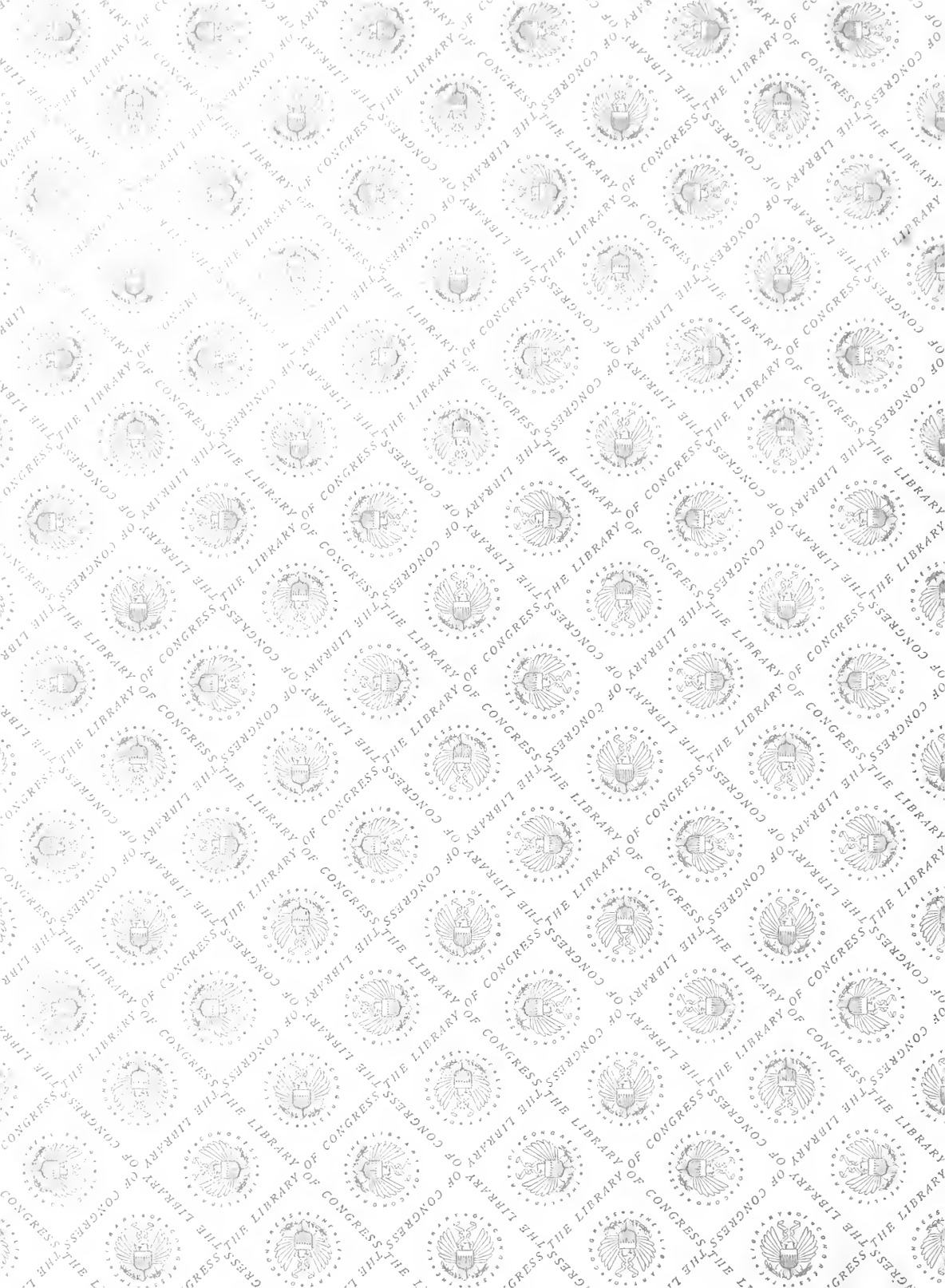
BUILD, O, build in loftier line  
 Than this prosing verse of mine,  
 Poets of our native land,  
 An epic of our wonderstrand,  
 Worthy of the heroes' grace  
 Who first revealed it to the race.  
 Lo! our own heroic age!  
 'Tis our classic heritage,  
 Linking us by line direct  
 To demigods too little recked  
 Since the conquering Latin host  
 Set up their gods for those we lost.  
 Christian sweetness, Gothic right,  
 Married in one shining light,  
 Breaking mediæval night,  
 Lit on Europe's northern shore  
 Beacons to burn forevermore.  
 When old St. Botolph's tower was new,  
 For boat-help builded as was due  
 That seaman saint of North Sea's shore,  
 Men still told Gudrid's story o'er,  
 Her pilgrimage, her wise, brave ways,  
 Coupling her works with his in praise.  
 This tower to her folk we rear,  
 A beacon to Discovery,—  
 Since ever truth shall make us free,—  
 That our free thought may wax the freer,  
 That we may welcome aye the new,  
 Patient to try if it be the true,  
 Nor say there is no more to hear.

R B 3.5











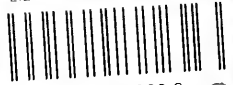
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